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The Market Price, Surplus, Net Earnings, And Dividends Of Common Stocks.

THE MARKET PRICE, SURPLUS, NET EARNINGS, AND DIVIDENDS OF COMMON STOCKS

BY

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THIS IS TO CERTIFY THAT THE THESIS PREPARED UNDER MY SUPERVISION BY

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IS APPROVED BY ME AS FULFILLING THIS PART OF THE REQUIREMENTS FOR THE

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GRAPHS

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THE MARKET PRICE, SURPLUS, NET EARNINGS, AND DIVIDENDS OF COMMON STOCKS

I. INTRODUCTION

The theory of the capitalization of income is not only advanced by economists, but it is also applied by investors and speculators. In Irving Fisher's "Elementary Principles of Economics"[1] we have the following statement: "Income is derived from capital-goods. But the value of the income is not derived from the value of those capital goods. On the contrary, the value of the capital is derived from the value of the income.----Not until we know how much income an item of capital will bring us can we set any valuation on that capital at all.-----This derivation of capital-value from income-value is called 'capitalizing income', or 'discounting income.'" To illustrate, let us suppose that the income to be gained from an industry is $6,000 and that money is worth six per cent. Then the business will be valued at $100,000.

One well-known application of the theory by investors and speculators is in the valuation of stocks. It is common to hear a speculator say that a certain stock is earning five per cent, and that it should therefore sell at about 90. He has arrived at this quotation thru multiplying the rate of five per cent by 18; that is, by capitalizing at five and one-half per cent. He will explain the fact that a stock is selling at a higher rate than its

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present earnings admit by stating that earnings will be more in the future--by capitalizing future earning power. He will justify a relatively low quotation by the explanation that the earnings upon this stock will probably decrease in the future.

While the capitalization of income theory is valid from the theoretical standpoint, difficulties are encountered in its practical application. In the valuation of bonds the theory can be applied very exactly. It can also be used with regard to preferred stocks. However, in placing a value upon common stocks, particular objections are to be found in its use. There are other factors by which the prices of common stocks are influenced.

As a matter of fact, it is not a particularly difficult matter to enumerate a large number of causes that affect the prices of common stocks. They may be classified broadly into two main divisions. Of these the first may be termed external causes. This class includes those factors which influence alike the price of stocks of all industries or the various units of any one industry. Such factors are the rate of interest, general monetary conditions, and trade conditions. The second class comprises what are called internal causes. In this division are embraced those factors which affect only one unit of an industry, not the industry taken as a whole. Among these factors are the character of the management, prospects of the business, manipulation of the stock, rate of earnings, dividends, and the accumulated surplus of the stock. To illustrate the difference between these two sets of causes--the external and internal--suppose a drop in the price of a stock is caused by a general rise in interest rates.

Then we say that an external cause has been at work. If, however, the drop has been brought about by a fall in the dividend rate while the interest rate in the community has remained constant, the drop has been caused by an internal cause.

The determination of the particular causes that are at work and of their relative potency is the source of the main difficulty. It is to consider these questions that the present investigation is made. The problem is, in brief, to try to eliminate as far as possible all causes except those of dividends, earnings, and surplus, and then to determine the relative effect of these three factors.

Thus the purpose of the investigation is two-fold. It is:

1. To collect and tabulate statistical data by means of observations on a number of common stocks for a term of years on the prices of these stocks, and their accompanying surpluses, earnings, and dividends.

2. To make use of such data to discover, if possible, how close a relation may be said, in general, to exist between market price and a) surplus b) net earnings applicable to dividends on common stock and c) dividends on the common stock.

The first object is in a measure incidental to the second, and is of course essential to any determination of the second.

<u>Scope</u>

The work includes twenty-three well-known common stocks, and covers a period of ten years for each stock, starting in 1904 or 1905, and ending in 1913 or 1914. The stocks selected embrace twelve railroads, two other public utilities, and nine industrials.

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All are listed on the New York Stock Exchange. Most of the stocks are included in the list from which Babson makes his Barometer of Prices. If it cannot be urged that the selection made is the best possible for the results desired, it can at least be contended that it is a fairly good one.

Sources of Data

Market prices were gathered from the Monthly Bank and Quotation Supplement of the Commercial and Financial Chronicle. All other data were procured from the reports of the several corporations in Moody's Manual of Corporations. These observations were compared with the corresponding figures shown in the Manual of Statistics, and any discrepancies investigated.

Definitions

By market price, as used in this paper, we mean the average price of the stock for the year to which the earnings and dividends quoted apply. The average is the simple arithmetic mean of the twenty-four high and low prices taken from the monthly price quotations. Two issues of the Supplement to the Commercial Chronicle (August, 1907 and May, 1911) are not at hand, and the prices for these years are computed on the basis of twenty-two observations. If the par value of a stock is other than $100, the price is reduced to that basis. An average taken in the manner before described can give only an approximate mean value of the prices of the stock, but it is sufficiently accurate for the purposes of the paper.

Dividends, as we use the word, include only dividends on the common stock for the fiscal year, and are a ratio of the amount of dividends to the total amount of common stock outstanding.

As we apply the term in the present paper, net earnings applicable to common dividends are the sum of dividends on the common stock for the fiscal year, plus any residue, divided by the total common stock. The residue includes surplus for the year, and all other items which are properly appropriations of profit, but excludes items which are charges against profits. If a deficit results after paying dividends, such a deficit is deducted instead of added. It may be that dividends upon preferred stock, which must be paid before any sum is applicable to dividends upon the common stock, are not declared. In such a case the amount of these dividends is also subtracted. Thus one sees that it is possible to secure a negative net earning. This concept may be criticised as a mathematical abstraction, but it has its justification, as will be shown later. The amount of the net earnings is obtained from the income account of the fiscal year. Due to the fact that the application of accounting science has not reached a state of uniformity, it is to be expected that some errors in reporting and observing earnings may result. It is to be hoped, however, that the data were gathered with sufficient care as to reduce the error to a minimum.

For present purposes surplus may be defined as the ratio of the accumulated net earnings minus the dividends, since the corporation was organized, to the total common stock outstanding. The surplus is taken from the balance sheet of the corporation.

and includes, as do the net earnings, all amounts which are properly appropriations of profits. Thus it is susceptible to the same sources of error as are the net earnings. It would seem fundamental from our definitions of earnings and surplus that the increase in surplus for each year should be the amount of the net earnings minus the dividends, but this is not always the case. This discrepancy may have resulted 1) from an increase of capital stock either by a sale of stock or thru a stock dividend or 2) from various adjustments and accounting procedures not carried thru the income account.

From these definitions it can be seen that all the items are ratios to the total value at par of the common stock. Price is a ratio of the market value of the stock, dividends of the divided earnings, earnings of the actual profit, and surplus of the accumulated profits. For this reason it would seem that all are comparable, and may be properly plotted on the same graphs, and to the same scale.

Graphs

The graphical method is used thruout the discussion. All factors--earnings, dividends, surplus, and price of each stock--are plotted upon the same graph. The same scale is used thruout, with one important exception. In the case of those stocks whose price has been above 100, the scale of the price is reduced to one-half that of the other observations. This must be carefully noted, not only because of its effect upon the relative position of the market price with regard to earnings, dividends, and surplus, but also because of the fact that it smooths the curve somewhat, and makes less noticeable the price fluctuations. Those

cases in which a reduction in the price scale is made can be easily recognized by the fact that an additional perpendicular scale is shown. Of the two scales the left refers to the price, while the right applies to the other three factors.

Grouping

In Moody's Manual of Corporations there are three main groups--Railroads, Industrials, and Public Utilities. Such a division is not strictly logical. A railroad is as much a public utility as any other kind of a public-service corporation. In the present paper the grouping of Moody is followed in the main, but the class "Public Utilities" is changed to "Other Public Utilities." We will now proceed to discuss briefly the corporations in these three groups, starting with the railroads, proceeding to the other public utilities, and ending with the industrials.

II. RAILROADS

It was not an easy matter to decide upon which railroads to include in the investigation. There are so many large and important railway systems in this country, that it was impossible, because of the limitations of time, to include them all, and it was something of a problem to select those which would be representative, and which would exhibit the general trend of the railway movement. Twelve stocks were finally selected. The list includes railways widely separated geographically, and greatly varied financially. There are those roads whose territory includes our Western and Pacific states, like Atchison, Topeka, and Santa Fe, and Eastern roads like Chesapeake and Ohio; there are such ultra-conservative roads as Pennsylvania, and such wildly-managed systems as New York, New Haven and Hartford; there are such eminently successful roads as Union Pacific, and those which, like Erie, have not paid a dividend on their common stock during the entire interval.

Each stock is considered separately, incidental comparisons are made with others of similar nature, and then a few general remarks are made from a consideration of all the stocks taken together.

Pennsylvania Railroad Company

Pennsylvania is almost a household word for conservatism. It is the road which was financed by "straight line" methods. Looking at its diagram (figure 1) one sees that it has earned its reputation for conservatism. During the ten year period its div-

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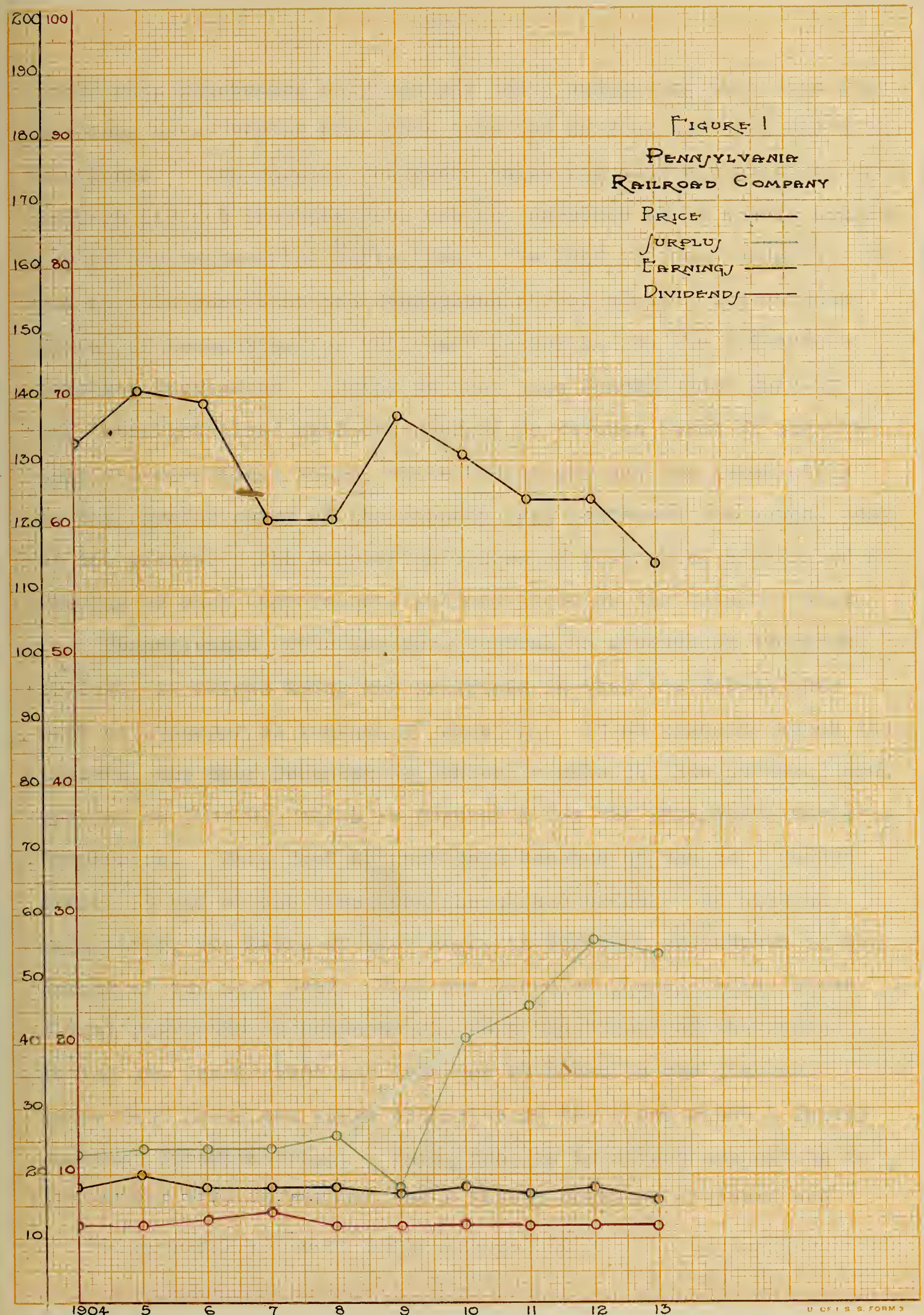

FIGURE 1
PENNSYLVANIA
RAILROAD COMPANY
PRICE
SURPLUS
EARNINGS
DIVIDENDS
200 100
190
180 90
170
160 80
150
140 70
130
120 60
110
100 50
90
80 40
70
60 30
50
40 20
30
20 10
10
1904 5 6 7 8 9 10 11 12 13

idend rate fluctuated only one per cent, and during this time its earnings never varied more than from two to four per cent above the dividends. Its surplus, however, calls for some explanation. Until 1910 it did not increase with the net earnings as it should according to our fundamental definition. In 1910 it rose suddenly. It was in this year that the Pennsylvania road adopted the uniform system of accounting for railroads prescribed by the Interstate Commerce Commission. Prior to that time Pennsylvania had, by its "straight line" methods, charged to revenue items of improvement and additions, which, while they might not add immediately to the earning power of the company, yet increased the actual cost of the assets. The Commission's form of accounting prescribed a showing of such improvements and additions on the balance sheet.

Pennsylvania, with New York Central, a discussion of which follows, is unique among the railroads in that its fiscal year ends on December 31 instead of June 30. It at present issues two reports, one upon December 31, which is made for its stockholders, and one on June 30, which is furnished for the Interstate Commerce Commission. This fact is mentioned because of the very marked effect it had at one time upon the market price. As will be remembered, the Panic of 1907 began in October, and abated in the Spring of the next year. Thus the price of Pennsylvania, whose fiscal year ends on December 31, felt the effect of the Panic during two years--1907 and 1908--as is shown in the diagram. Aside from these two years the price of the stock shows a fairly constant downward trend. This, too, is in direct opposition to the sudden rise in surplus and a fairly constant dividend and

earning rate. We must, however, remember the explanation for the increase in surplus, and recall that it came about more thru a change in accounting methods than by an actual increase. Also, upon examination, we see that there has been a one per cent drop in dividends after 1908, since which time the principal drop has occurred. The tendency, however, with such stable dividends and earnings, indicates the working of external causes.

New York Central and Hudson River Railroad Company

New York Central is usually considered with Pennsylvania. These roads are the country's two largest railway systems. They cover nearly the same territory, and their policies have been somewhat similar. New York Central has not, however, earned as much per share of common stock, nor declared as large dividends as has Pennsylvania. Its dividends have been only five per cent except in 1907 and 1910, in which years they were six per cent (figure 2). It is interesting to note how little the dividends and earnings of these two roads changed in 1907, although the Panic caused a great drop in their prices. Earnings of New York Central do not show the margin over dividends that is shown by those of Pennsylvania. At no time have they been more than two and one-fourth per cent above dividends, and during one year they nearly coincided. Furthermore, the surplus of New York Central has not grown. The road has not been financed by "straight line" methods to the extent of Pennsylvania. The price of New York Central has fluctuated rather widely. One sees a rather close correspondence to a drop in earnings and dividends in 1908, and

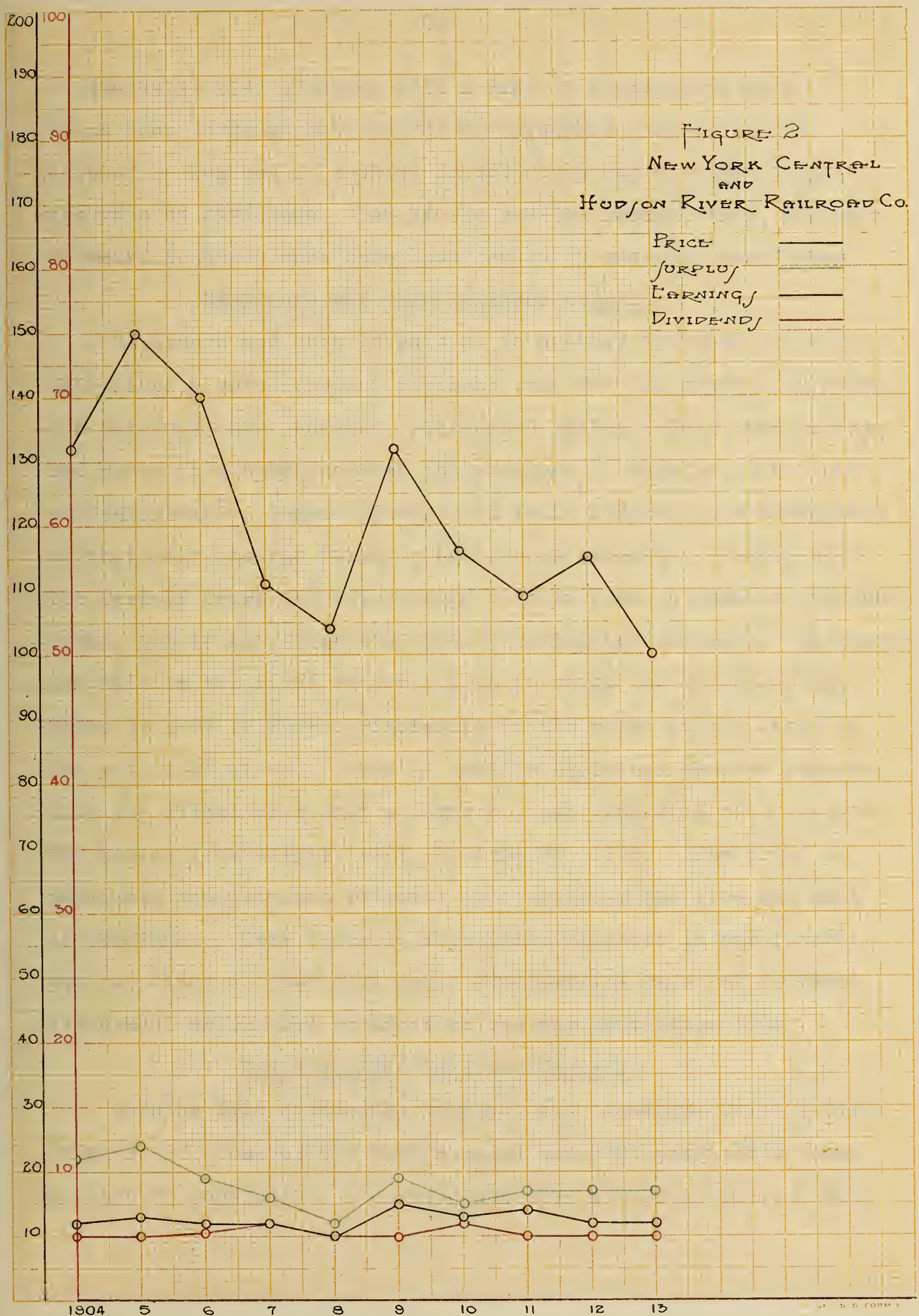

Figure 2
New York Central and Hudson River Railroad Co.
Price
Surplus
Earnings
Dividends
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
100
90
80
70
60
50
40
30
20
10
1904
5
6
7
8
9
10
11
12
13

a remarkable rise of price with a rise in earnings in 1909. Since then earnings have fallen off somewhat, and price has dropped. Nor was it revived in 1910 by a one per cent rise in the rate of dividends. As in the case of Pennsylvania, the main downward tendency must have been caused by external conditions.

Baltimore and Ohio Railroad Company

Baltimore and Ohio (figure 3) is another railroad which has maintained a very constant dividend rate for the years considered. Its earnings have, however, fluctuated rather widely, and during two years dividends exceeded the earnings. Surplus, like that of Pennsylvania, jumped suddenly in 1910, but with the exception of that year accords fairly closely with earnings. Taken over the term of years the price seems to have been on about a constant level, but it has fluctuated widely during the interval. Baltimore and Ohio is the first of our stocks in which the effect of the Panic of 1907 is shown principally in the price of the stock in the year 1908 alone. This is readily explained when we consider that the fiscal year ends on June 30, and 1908 will then include the period from July 1, 1907, to June 30, 1908. The price of Baltimore and Ohio has followed in every year the rise and fall of earnings. This stock is especially valuable in our investigation, since we know that price fluctuations have not followed dividends, which have remained at six per cent since 1906.

Union Pacific Railroad Company

Judging from dividends, surplus, and earnings, Union Pacific (figure 4) is one of the best managed and most profitable roads we have to consider. Its dividends rose from four and one-half

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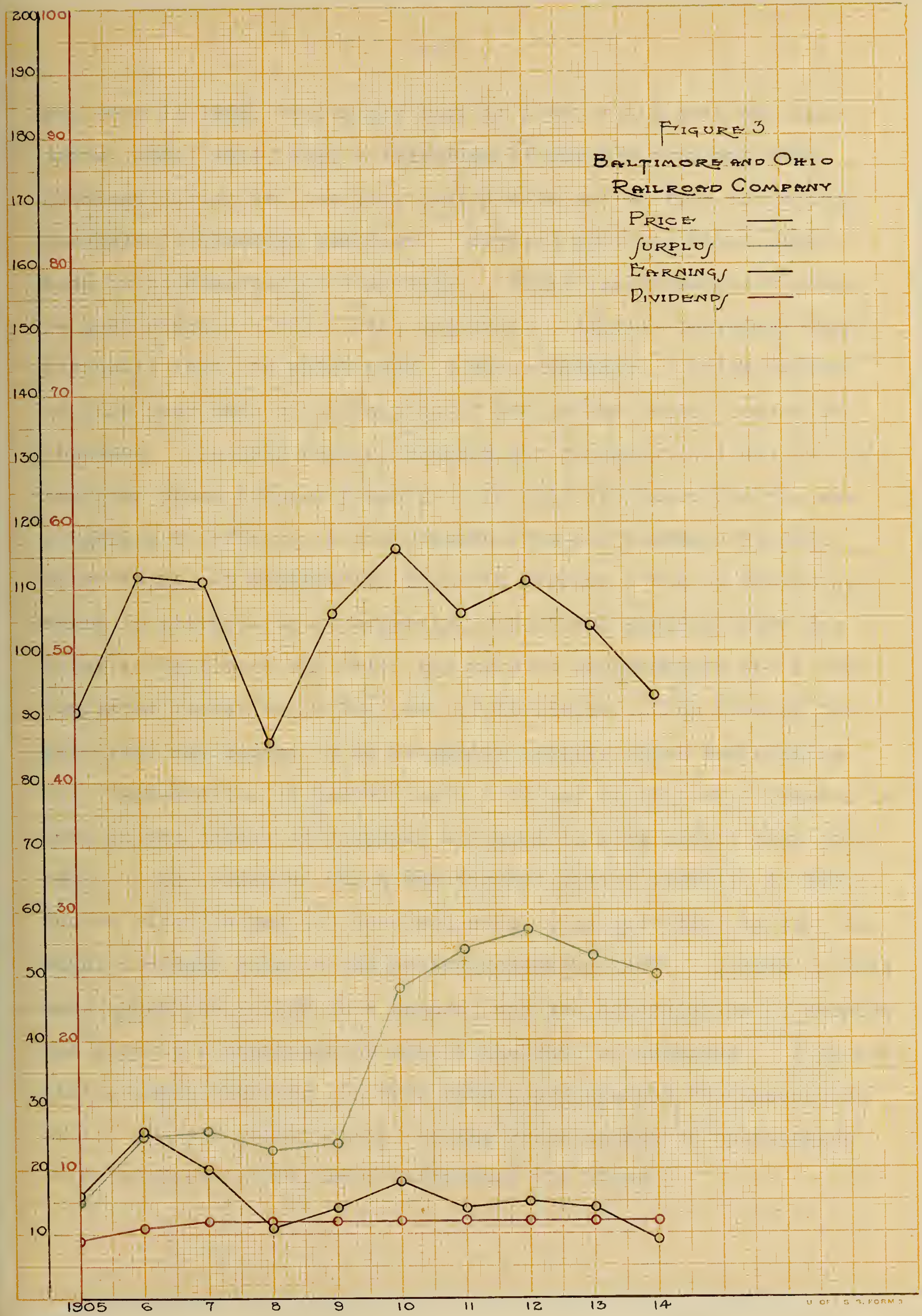

Figure 3
Baltimore and Ohio
Railroad Company
Price
Surplus
Earnings
Dividends
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
100
90
80
70
60
50
40
30
20
10
1905
6
7
8
9
10
11
12
13
14
U OF I S. S. FORM 3

per cent in 1905, to ten per cent in 1907, which rate was maintained until 1914, when a reduction of one per cent was made. Earnings during the ten year period have varied from eleven and one-half to nineteen per cent. Surplus would at first sight seem to be somewhat of a mystery. There are three years which we must explain--1911, 1913, and 1914. Surplus increased steadily until 1911, in which year it rose suddenly. Union Pacific in this year made a revaluation of its assets, which caused the increase. In 1912 surplus reached its pinnacle, and during the next two years dropped greatly. In 1913 the Union Pacific was compelled to effect its dissolution from the Southern Pacific. In so doing, it distributed from its surplus a sum of $33.30 per share in addition to an exchange of Southern Pacific stock for stock in Baltimore and Ohio, and also as compensation for a contemplated reduction in the rate of dividends. The drop of the next year was caused by an extensive reserve which was created for "Depreciation of Securities". It may be that this reserve is more in the nature of surplus, but upon this we cannot pass judgment. The price of Union Pacific has varied from 114 to 193.5. Such a wide fluctuation does not seem to be justified by the constant dividend rate in the period following 1907. Prices in this case appear to follow in a general way the accumulation of surplus and also to a considerable extent the rate of earnings. I believe that we must, however, in this case guard against the assumption of too close a relationship, as the great amount of speculation in Union Pacific must have influenced its price.

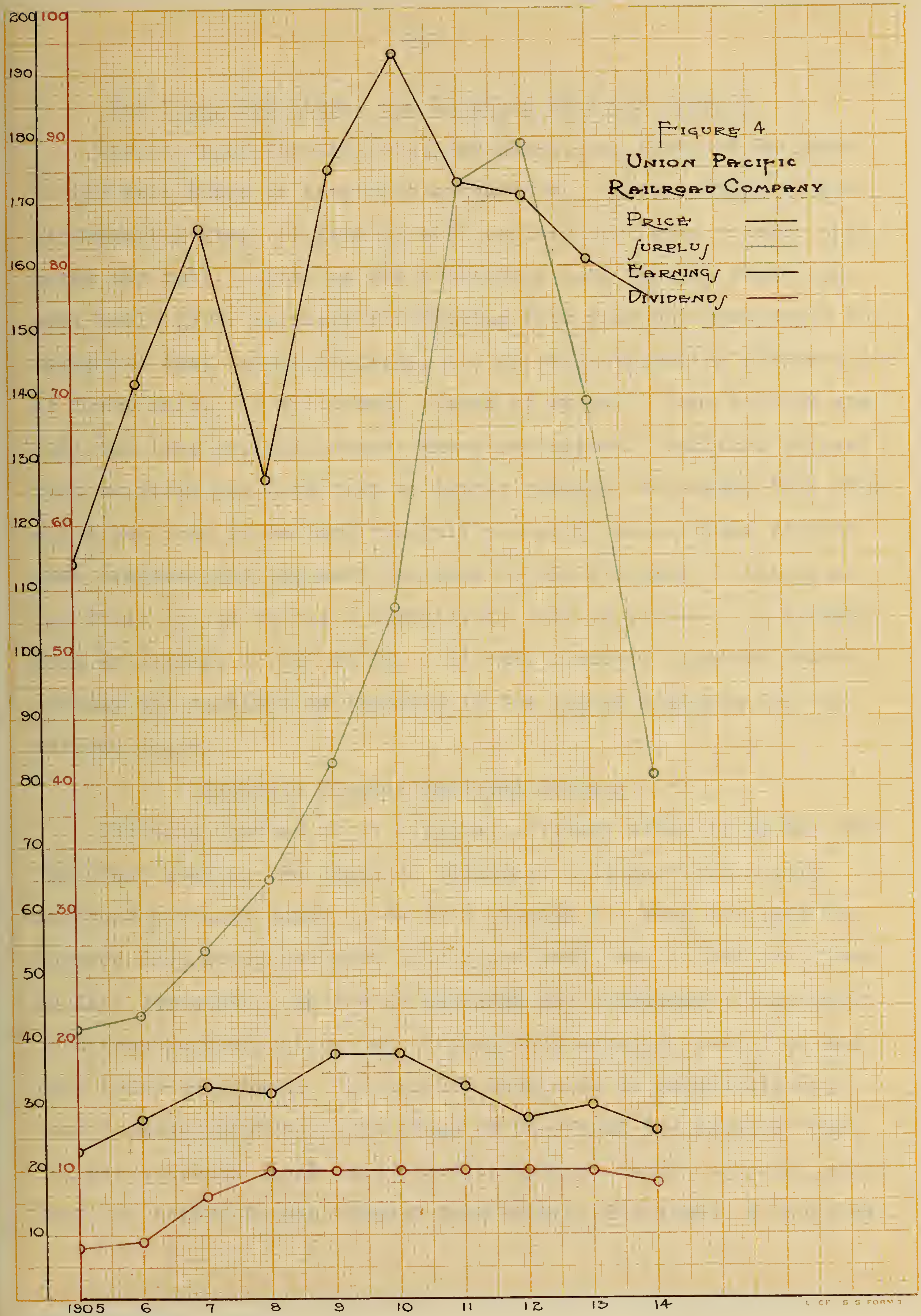

Figure 4
Union Pacific
Railroad Company
Price
Surplus
Earnings
Dividends
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
100
90
80
70
60
50
40
30
20
10
1905
6
7
8
9
10
11
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13
14

New York, New Haven, and Hartford Railroad Company

The story of the New York, New Haven, and Hartford Railroad is too well known to need much discussion. Also a study of the accompanying graph (figure 5) will explain the facts clearer than words can tell. Here we see a dividend rate kept at eight per cent until 1913, earnings fluctuating from four per cent above to three per cent below dividends, and an ever-decreasing surplus, due at first mainly to additional issues of stock. Then in 1913 and 1914 the true conditions were known and exposed, earnings dropped from thirteen per cent down to nearly nothing, dividends fell from eight per cent to one and one-half per cent, and surplus dropped from nineteen and one-half per cent to one per cent. Accompanying these losses we see a sensational fall in price. It dropped from an average of 202 to 78. It has, however, followed rather closely the earnings as reported in the income accounts for the various years.

Illinois Central Railroad Company

Illinois Central is of especial interest since it is the most important road in the State of Illinois. It has been a very constant dividend payer up to 1913 (figure 6), when its rate was lowered from seven per cent to six per cent, and in the next year to five per cent. As far as earnings are concerned it has shown considerable fluctuation, and during 1912 earnings were four per cent below dividends. It has not been able to accumulate any considerable surplus. The price of the stock has shown a very decided downward trend, and its fluctuations cannot be said, until 1913, to accord in any respect to earnings, dividends, or surplus.

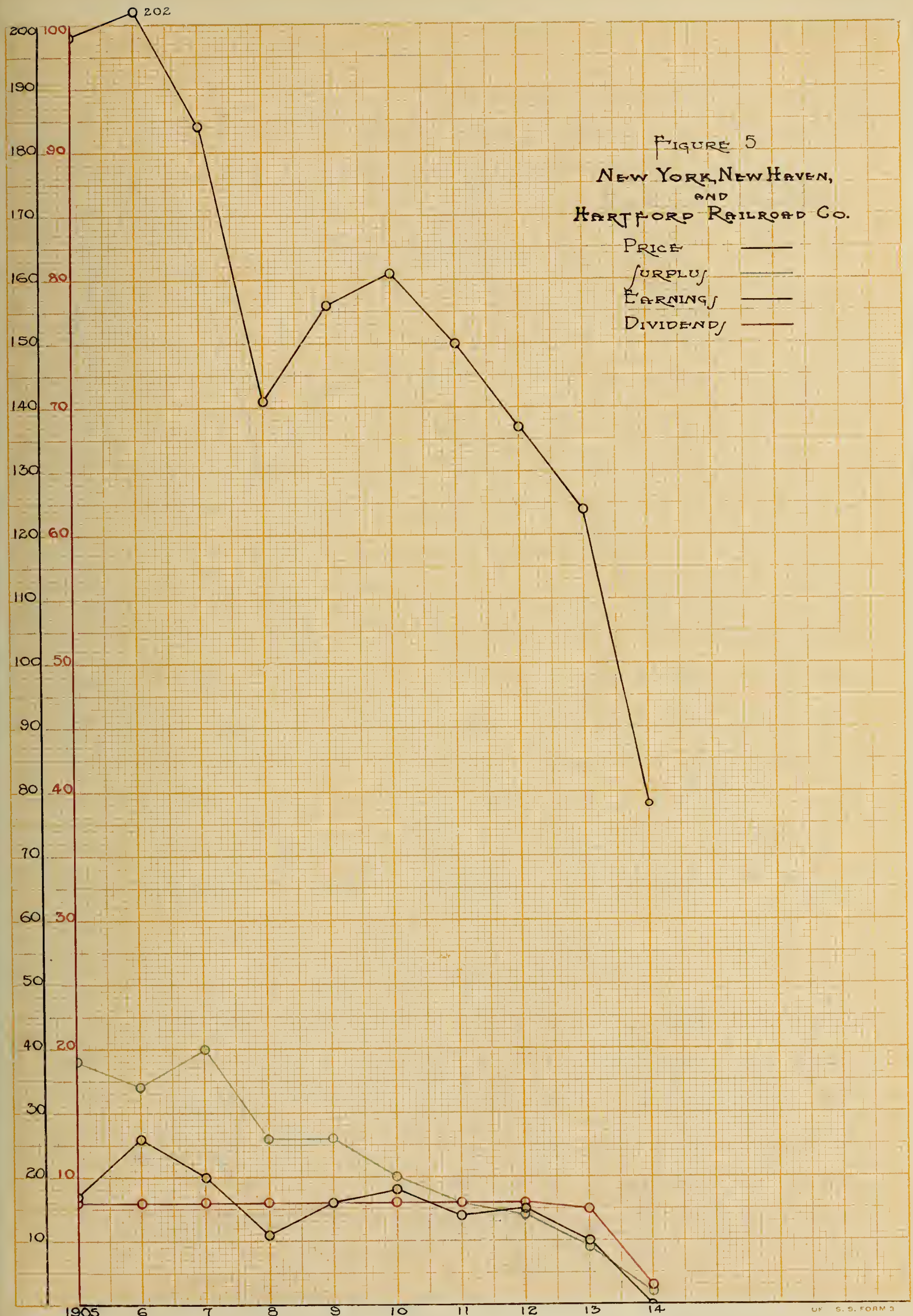

Figure 5
New York, New Haven, and Hartford Railroad Co.
Price
Surplus
Earnings
Dividends
202
200 100
190
180 90
170
160 80
150
140 70
130
120 60
110
100 50
90
80 40
70
60 30
50
40 20
30
20 10
10
1905 6 7 8 9 10 11 12 13 14

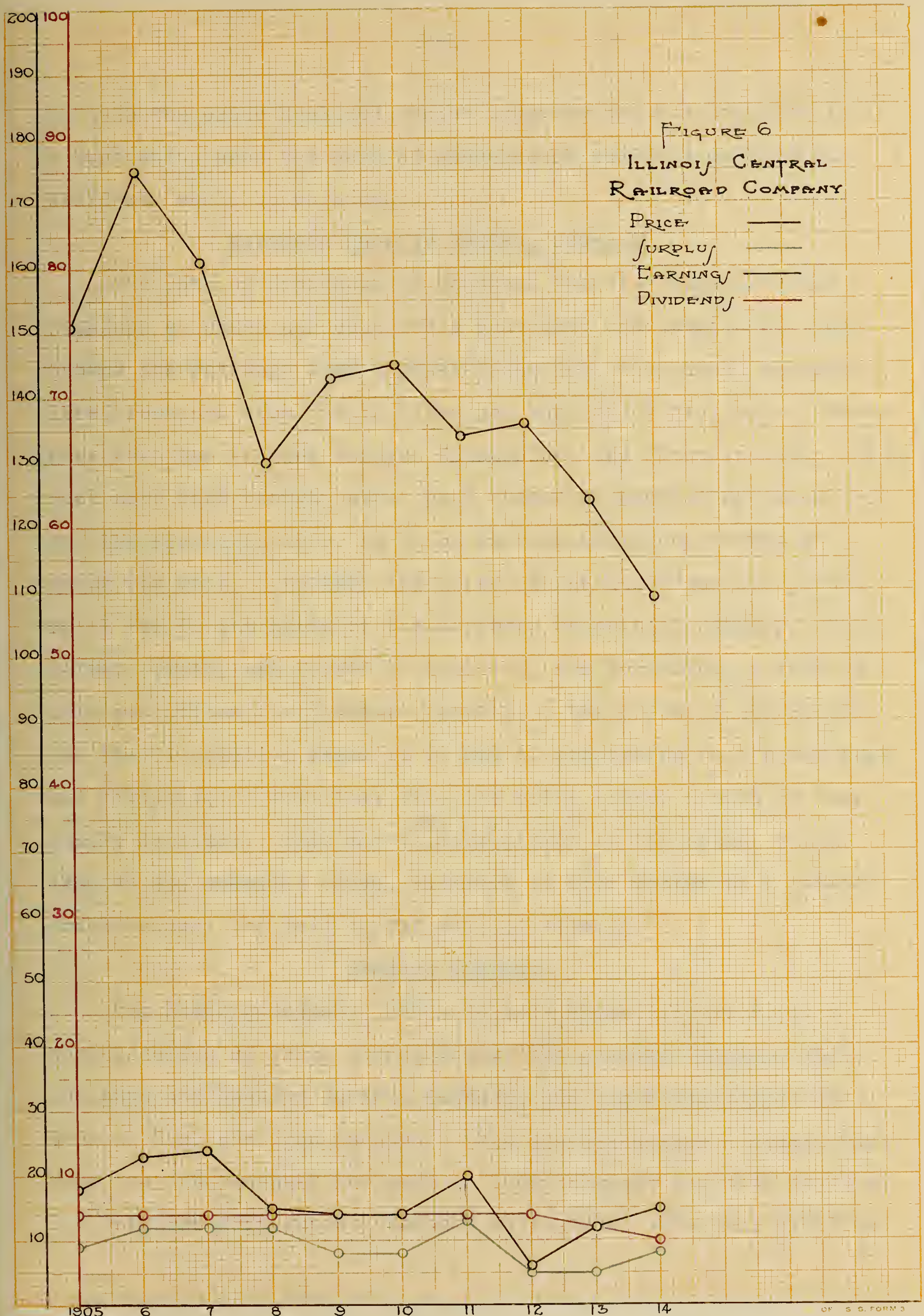

Figure 6
Illinois Central Railroad Company
Price
Surplus
Earnings
Dividends
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
100
90
80
70
60
50
40
30
20
10
1905
6
7
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9
10
11
12
13
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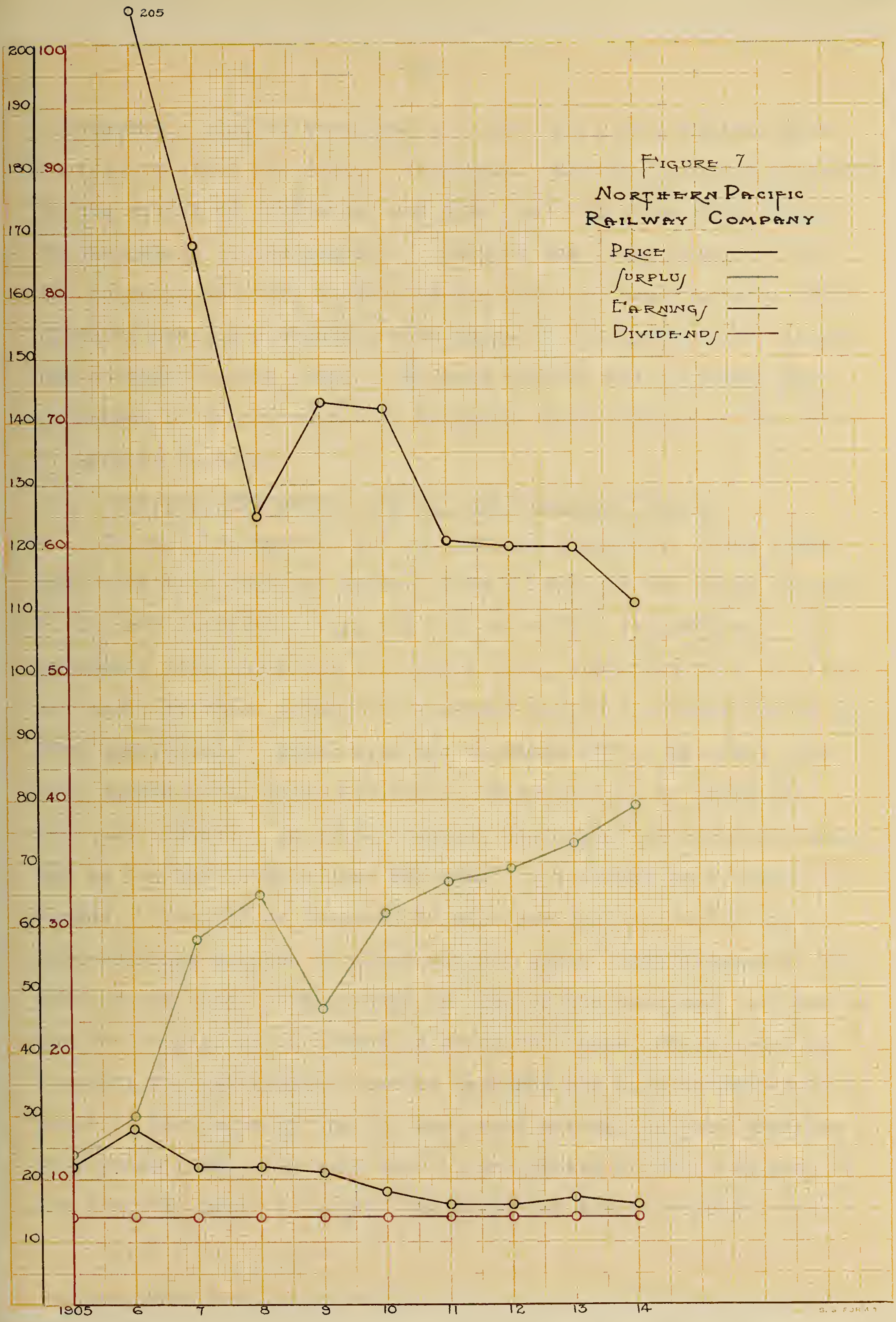
In 1913 the price declined, which probably was due principally to a conviction upon the part of speculators that the decline in dividends would be permanent.

Northern Pacific Railway Company

The rate of dividends of Northern Pacific (figure 7) has remained at seven per cent every year that was considered. Although its earnings show a general decline, they have, nevertheless, remained from one to seven per cent above dividends. There have been two violent changes in surplus, the first in 1907, which must have been brought about by a change in accounting procedure, and the second in 1909, in which year an additional issue of stock was made. In 1905 the price of the stock was not quoted, as it was in the hands of the Northern Securities Company. This latter company was forced to dissolve, and beginning in 1906 we have quotations for Northern Pacific. The price of 205 following the dissolution seems to be out of proportion to its earnings and dividends. From that time the price showed a more or less steady decline. This may be due more to a drop to its normal value than to any specific cause, although it does follow to a considerable extent the fall in the rate of earnings.

Reading Company

The Reading Company, as it is here shown (figure 8) is a consolidation of three corporations--the Reading Company, Philadelphia and Reading Railway Company, and the Philadelphia and Reading Coal and Iron Company. Its dividends show a steady rise from one and one-half per cent in 1905 to eight per cent in 1914. Its earnings were rather constant until 1913, when they exhibited



205
Figure 7
Northern Pacific
Railway Company
Price
Surplus
Earnings
Dividends
200 100
190
180 90
170
160 80
150
140 70
130
120 60
110
100 50
90
80 40
70
60 30
50
40 20
30
20 10
10
1905
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13
14

a remarkable rise to seventeen per cent, with an immediate drop in 1914 to eight per cent. In general earnings have not increased to the extent of dividends, and this fact indicates some change in the policy of the company. Surplus has risen steadily, and has corresponded very closely to the value we would expect. The price of Reading presents a wide range of fluctuation, but it has had a steady upward trend. As both surplus and dividends have increased it is impossible to determine what portion of the rise to ascribe to each.

Chicago, Milwaukee, and St. Paul Railway Company

Chicago, Milwaukee, and St. Paul is a railroad whose financial condition does not appear, from a study of its graph (figure 9) to have improved during the period we have to consider. Its dividends were seven per cent until 1912, when they fell to five per cent, at which point they remained during the remainder of the time considered. Until 1912 the earnings of the St. Paul road were considerably above dividends, being as high as seventeen per cent (1906). In 1912, however, dividends and earnings dropped to the low level of one per cent, or four per cent below dividends. In 1913 an increase to nine per cent was made, but in 1914 earnings dropped to about six per cent. The decreasing surplus of the road looks strange in view of its earnings, but during the period various increases in stock were made, which acted to increase the net capital, but to decrease the surplus per share of stock. The price of the St. Paul road has fallen very considerably since 1905. In that year it was quoted at 170, and rose to 179 the next year. In 1908 the usual low point occurred, with a

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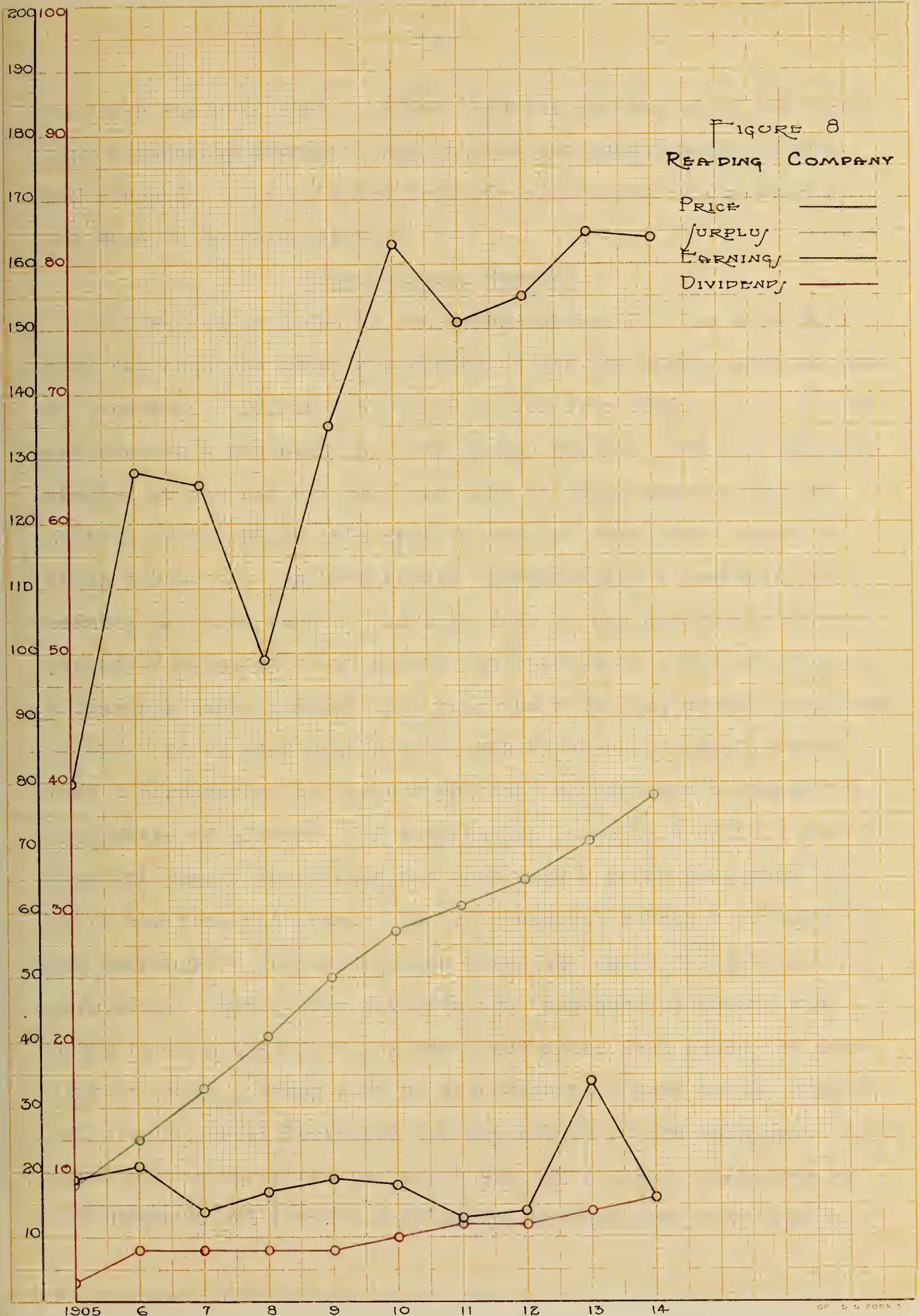

Figure 8
Reading Company
Price
Surplus
Earnings
Dividends
200 100
190
180 90
170
160 80
150
140 70
130
120 60
110
100 50
90
80 40
70
60 30
50
40 20
30
20 10
10
1905 6 7 8 9 10 11 12 13 14

recovery the next year. After 1909 the general trend has been very noticeably downward, and in 1914 the lowest point of 102 was reached. The rise and fall of price and earnings seem in the main to be coincident.

Erie Railroad Company

If we are to judge by its graph (figure 10) the Erie Railroad has been the least successful of all the roads which we have to consider. During the entire period from 1905 to 1914 it did not declare a dividend upon its common stock. Its net earnings started at one and one-half per cent in 1906, rose to two per cent in 1907, and in 1908 sank to the low level of a negative three per cent. We have before explained how a negative net earning may come about. In this case it was due partly to an excess of expenses over revenue, and partly to a failure to pay a four per cent dividend upon both the first and second preferred stock. If we must stop when we get to zero and merely state that a corporation has earned nothing, we have not pictured the true state of affairs. A corporation in which a deficit results from the year's operations has gone thru a worse year than one which has come out even. In the graphical method a deficit in net earnings is very well shown where the curve falls below the zero line. After 1908 net earnings increased somewhat, but never to more than five per cent, and again fell below the zero line in 1914. After 1907 no dividends were paid on the preferred stocks, which decreased the net amount of the earnings. While dividends on the preferred stock are not a direct liability of the company, and are not cumulative, nevertheless they must be

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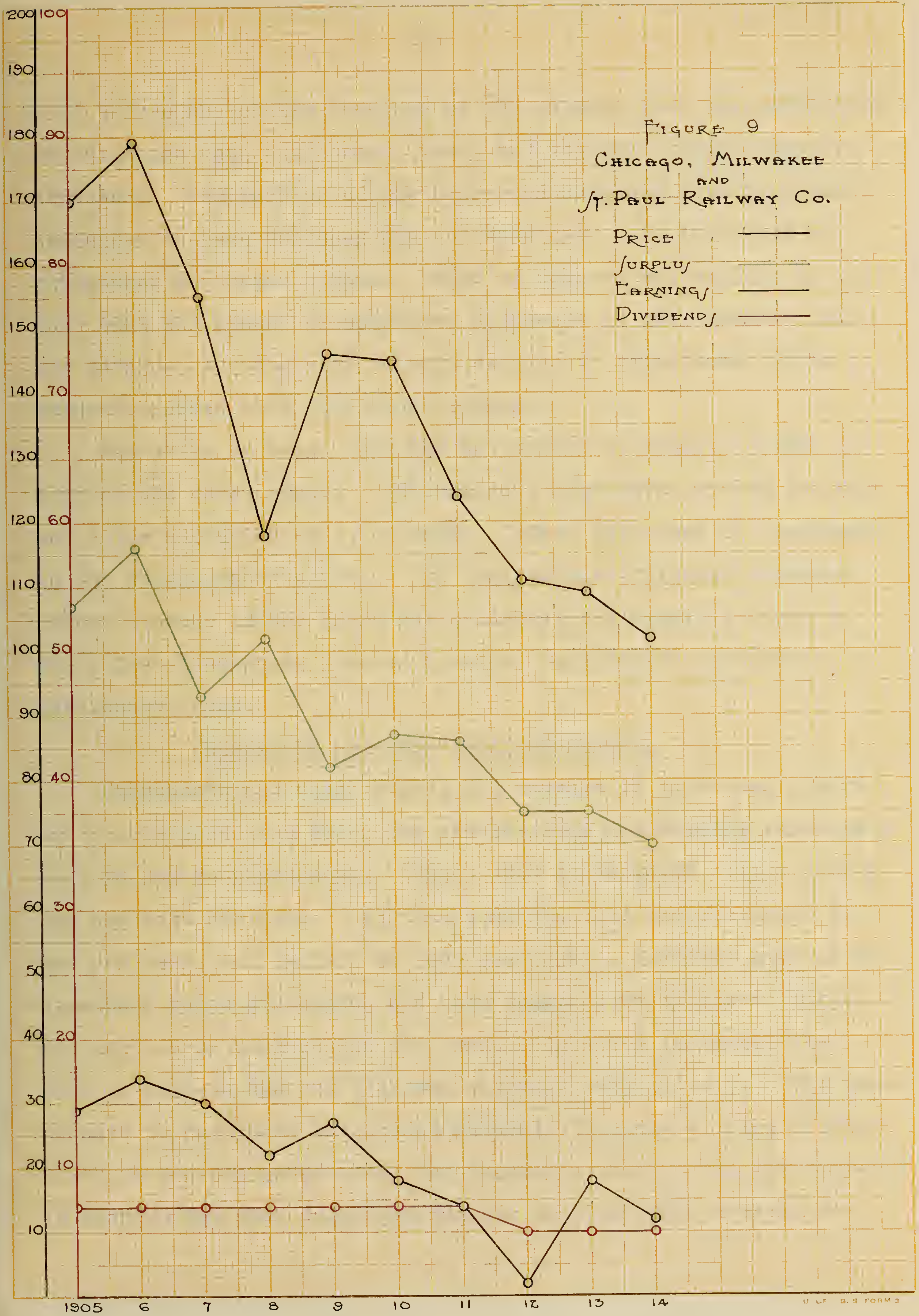

Figure 9
Chicago, Milwakee and St. Paul Railway Co.
Price
Surplus
Earnings
Dividends
200 100
190
180 90
170
160 80
150
140 70
130
120 60
110
100 50
90
80 40
70
60 30
50
40 20
30
20 10
10
1905 6 7 8 9 10 11 12 13 14

paid before any of the earnings of the current year are applicable to dividends upon the common stock, and for this reason they are deducted. The surplus of the Erie road does not seem in several instances to have followed the net earnings. It increased at altogether too rapid a rate. Part of this we may explain by the fact that the amount of preferred dividends is not deducted from the surplus, and the rest we must ascribe to adjustments which were not passed thru the income account.

The price of Erie stock has not varied as widely as that of some of the other roads. It reached a high point of 46½ in 1906, and a low quotation of 18 in 1908. After this year it fluctuated in the neighborhood of 30. Its changes have followed earnings rather closely in the main, but evidently not surplus, since we see a fast-increasing item of surplus, while price remained at a stationary level.

Chesapeake and Ohio Railroad Company

Chesapeake and Ohio (figure 11) appears to have been a more profitable road than Erie, but its dividend and earning rates have been in nowise phenomenal. Until 1909 it declared only a yearly one per cent dividend. In that year the rate was increased to two per cent, and in 1911 to four per cent. Earnings have at no time been below dividends, and have ranged from as low as three per cent up as high as ten per cent. In a few instances the item of surplus has not followed earnings very closely. The road appears to have made various adjustments thru the surplus account which it has not passed thru the income account. The net increase in surplus has been only from one per cent in 1905 to seven per

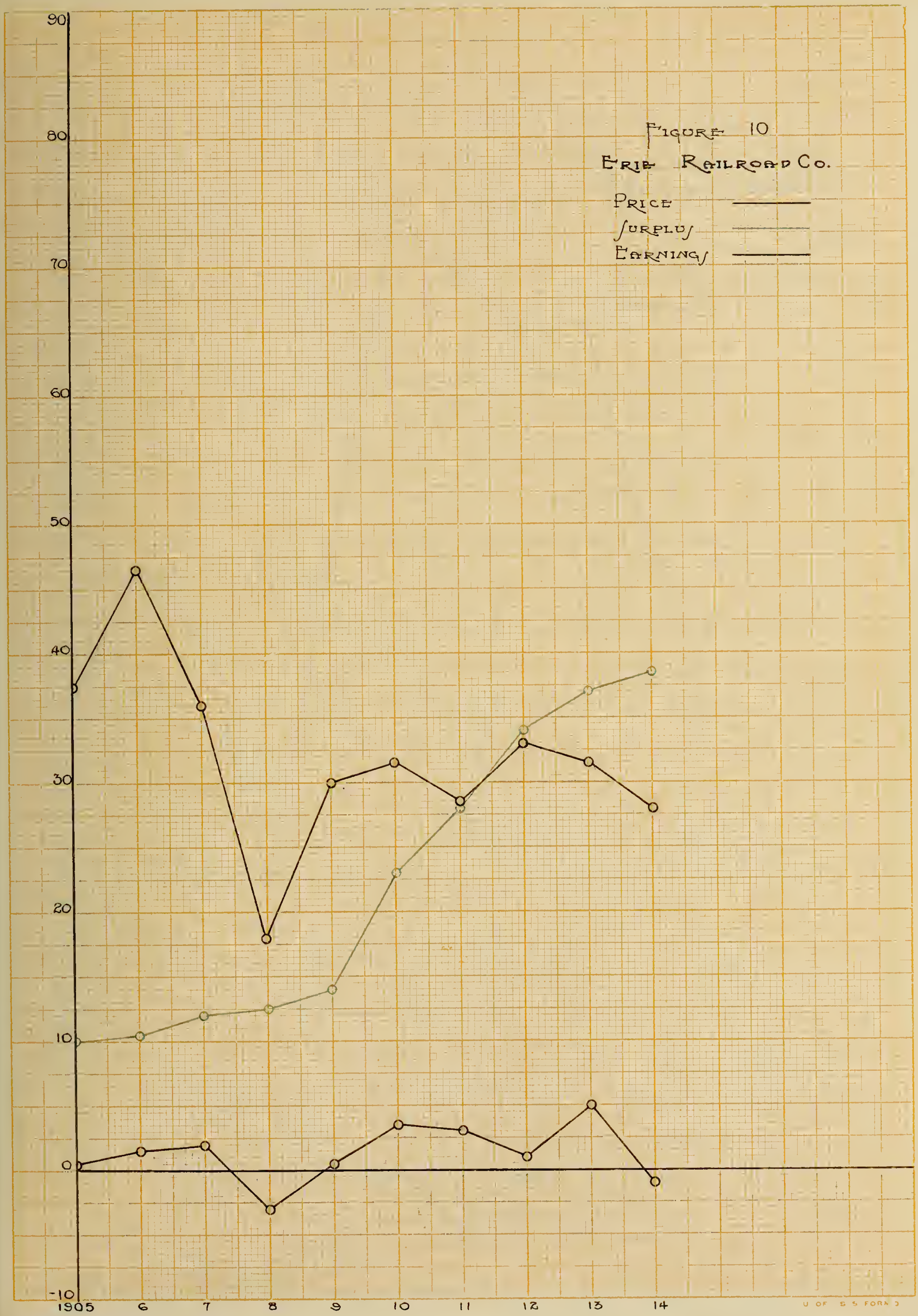

Figure 10
Erie Railroad Co.
Price
Surplus
Earnings
90
80
70
60
50
40
30
20
10
0
-10
1905
6
7
8
9
10
11
12
13
14

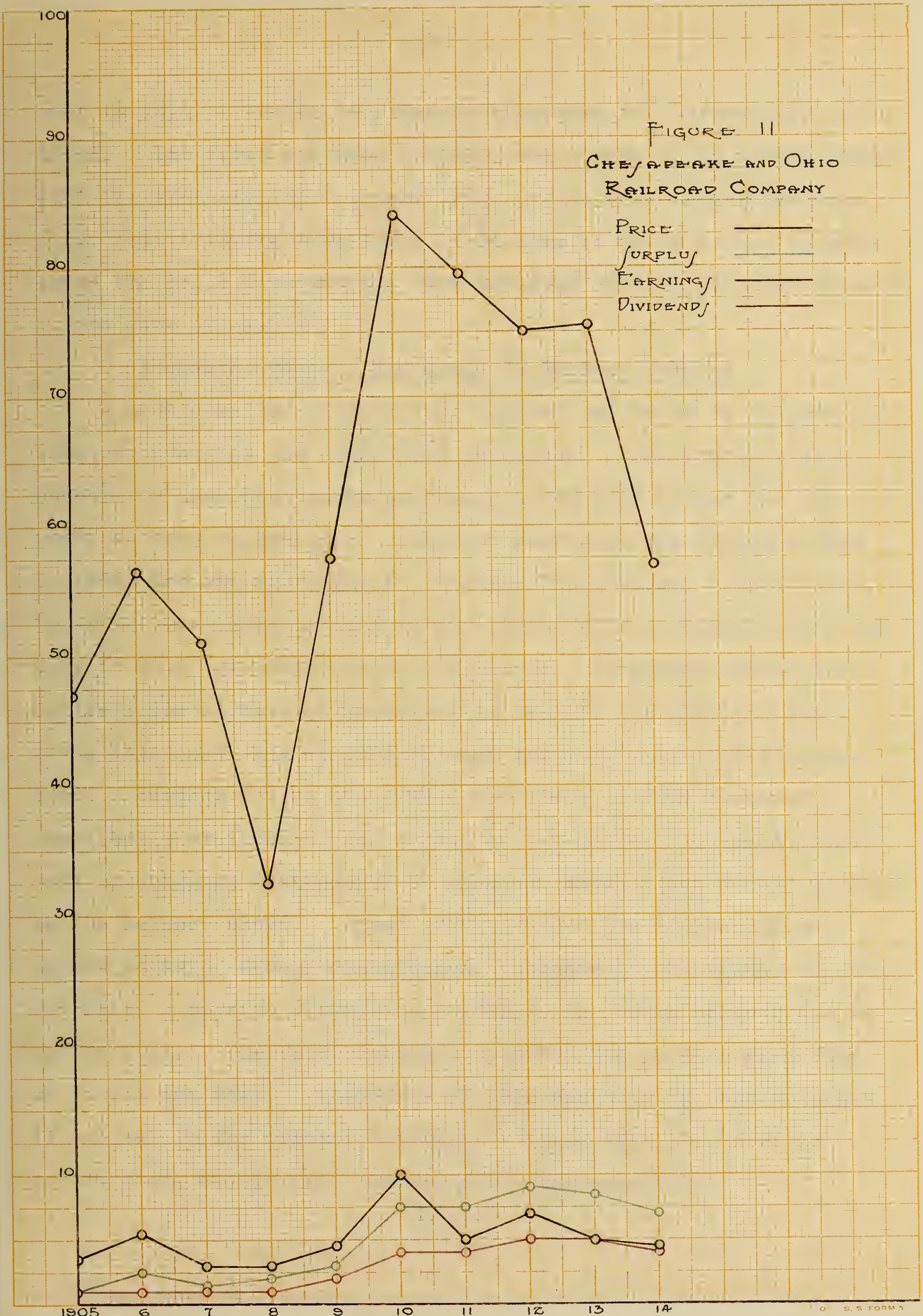
Figure 11
Chesapeake and Ohio
Railroad Company
Price
Surplus
Earnings
Dividends
100
90
80
70
60
50
40
30
20
10
1905
6
7
8
9
10
11
12
13
14
S. S. Form 7

cent in 1914. As far as price is concerned two periods are to be noted. The first extended to 1910, and during it an upward trend, with the exception of the year 1908, prevailed. After 1910 the price fell from the high level of 84 down to 57 in 1914. In most cases the price fluctuations have followed very closely the changes in the rate of earnings.

Atchison, Topeka, and Santa Fe Railway Company

A consideration of Atchison, Topeka, and Santa Fe (figure 12) ends our study of the individual railroads. The Atchison road appears to have been quite uniformly successful during the ten years we have to consider. Its dividend rate was four per cent in 1905, and was increased to five and one-half per cent in 1906. In 1907 it was lowered to five per cent, but was raised to six per cent in 1910, at which level it remained. Earnings during the entire interval were never less than one and one-half per cent above dividends, and in 1907 reached the high mark of fifteen per cent. Surplus during the period from 1905 to 1908 remained practically stationary, due to the policy adopted by the Atchison road of charging betterments to revenue, which items were not shown on the balance sheet. After 1908 surplus rose with earnings, except in 1910, when a considerable increase in the amount of stock was made. As with Chesapeake and Ohio, two price periods are to be observed. The first extended to 1910, and in it a gain from 84 to 116 was made. The price in 1908 was only 79, but is plainly a break in the general tendency. After 1910 the level of prices fell, and in 1914 the quotation was only 95½.

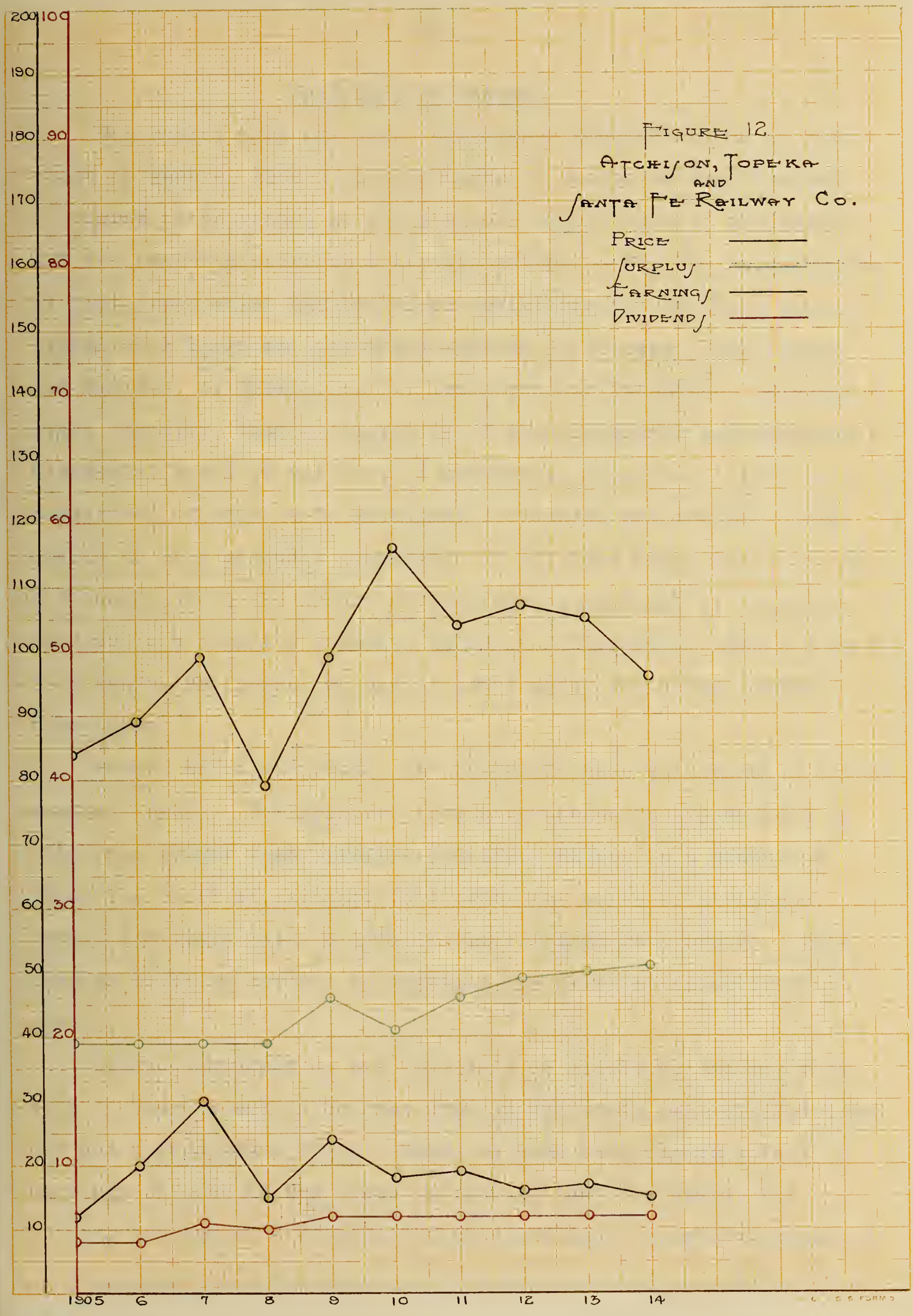

Figure 12
Atchison, Topeka and Santa Fe Railway Co.
Price
Surplus
Earnings
Dividends
200 100
190
180 90
170
160 80
150
140 70
130
120 60
110
100 50
90
80 40
70
60 30
50
40 20
30
20 10
10
1905 6 7 8 9 10 11 12 13 14

Railroads in General

One cannot draw any very intelligent conclusions as to railroads in general from a consideration of twelve railway systems. Of course these roads, as we have pointed out before, are large, and are representative to a certain extent. Yet the majority are of that group which may be termed "successful". We have not included such large and ill-fated systems as Chicago, Rock Island, and Pacific, or Wabash, or St. Louis and San Francisco. One may argue, however, that a discussion of the successful and moderately successful roads is all that is necessary, since our object is a comparison of price with earnings, dividends, and surplus. Naturally no very adequate comparison is provided where there are no dividends, where the amount of earnings is negligible, and where surplus is a negative quantity known as deficiency. Nevertheless, from twelve railroads, we can at least point out a few general tendencies.

First, as to dividends, the railroads have maintained a fairly constant rate. Furthermore, they have seemed to try to keep up this rate longer than earnings justify. We see in a number of cases the curve of earnings fall below the curve of dividends. Then a few years later a drop in the dividend rate occurs. This appears to be an attempt to maintain the price at an artificial level.

Second, earnings do not fluctuate as widely as one might expect. There seems to be some drop in the Panic year of 1907-1908, but not a remarkable fall. There is some tendency to a fall in earnings of most of the roads during the last few years, but whether because of a disproportionate increase in capital stock, a

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more adequate provision for depreciation, or a decrease in traffic rates, it is not for us to say.

Third, the item of surplus is one of which we can generalize very little. Its amount seems to be affected in some cases by the new accounting procedure prescribed by the Interstate Commerce Commission. Some of the roads have used up their surplus to pay dividends, or its relative size has been decreased thru additional stock issues. In one case a stock dividend was declared out of surplus. Some roads have adopted a conservative policy and have piled up their surplus for the betterment of the road. There has been little uniformity, however, and we cannot say what has been the general tendency.

Fourth, price fluctuations are remarkable because of their size and trend. We expect the prices of the speculative roads to vary widely during the period, but one would suppose that the prices of the more conservative would not fluctuate so widely. The prices of all the stocks of course drop greatly during the Panic, which, as we have shown, affected the railroads (with two exceptions) in 1908 principally, because of the period of their fiscal year. Aside from this, we cannot say that in general there has been any marked uniformity. Six roads have shown a constant downward trend in price, one has tended upward, one has remained at a stationary level, and four show first a rising and then a falling tendency. The violence of the price fluctuations leads to one very natural question--can the common stocks of any railroads be placed in the investment class?

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III. OTHER PUBLIC UTILITIES

Only two public utilities, exclusive of the railroads, were selected. They are the American Telephone and Telegraph Company and People's Gas Light and Coke Company of Chicago. These two corporations are representative of the group, and time does not permit further examples of a class which is not relatively as important as the railroads or industrials.

Public utilities are generally supposed to be as conservative an investment as any common stocks, since their earnings are generally fairly constant, and their price fluctuations small. As far as earnings and dividends are concerned, the investigation seems to bear out this supposition. With regard to price, however, even these two stocks show considerable fluctuation.

American Telephone and Telegraph Company

The dividends of American Telephone and Telegraph (figure 13) have varied only one-half per cent in ten years--from seven and one-half per cent to eight per cent. During the interval earnings also have shown little change. At all times they have been from one-half to one and one-half per cent above dividends. Surplus has, however, behaved in a different manner. It rose steadily with earnings until 1909, when it jumped from ten per cent to eighteen per cent. This may be explained as a revaluation caused by a change in the manner of presenting reports. In the other years, except 1911, surplus rose as one would expect. In this year a considerable issue of stock was made, which accounts for the decrease in surplus. The price of American Telephone

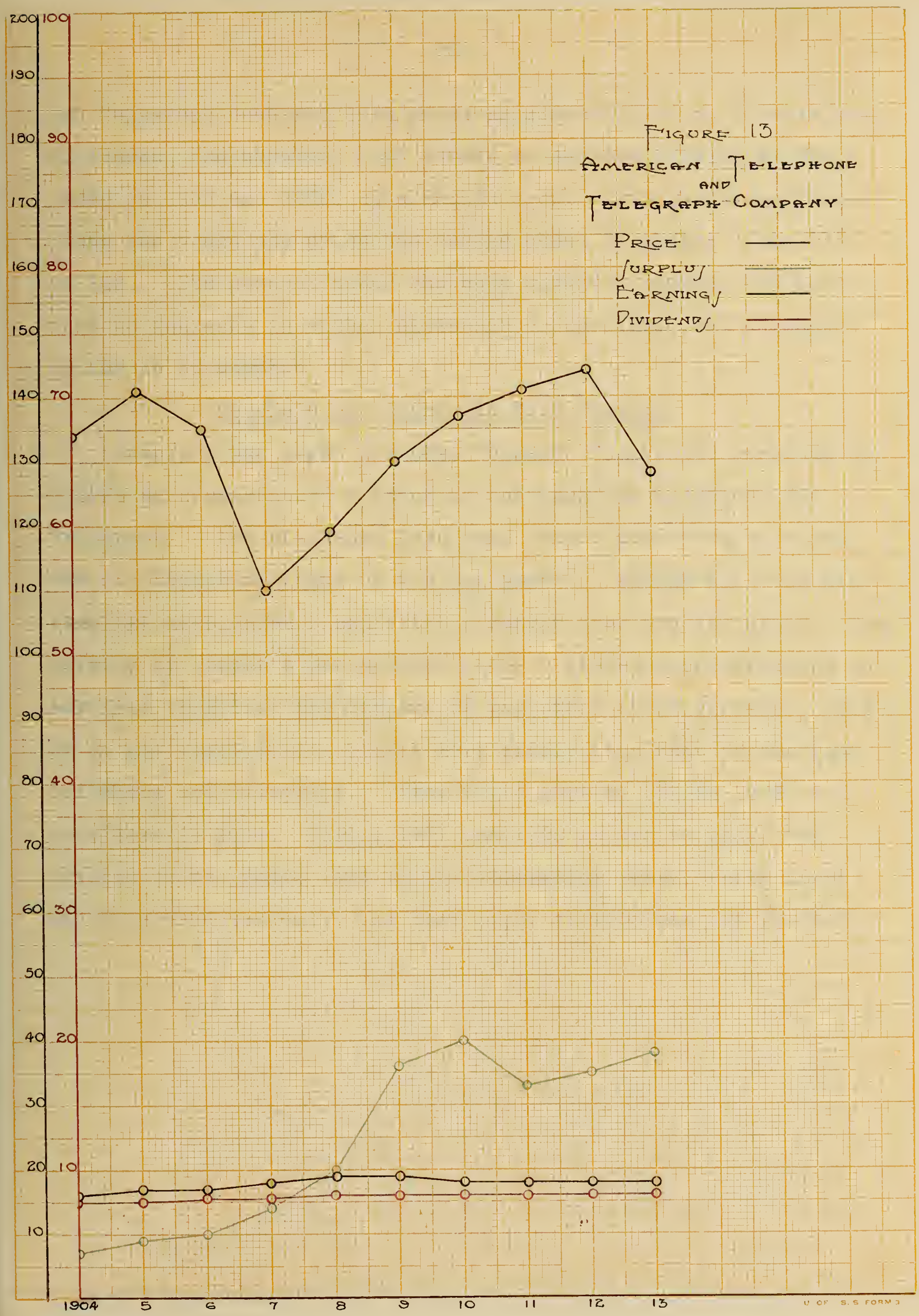

Figure 13
American Telephone and Telegraph Company
Price
Surplus
Earnings
Dividends
200 100
190
180 90
170
160 80
150
140 70
130
120 60
110
100 50
90
80 40
70
60 30
50
40 20
30
20 10
10
1904
5
6
7
8
9
10
11
12
13
U. OF S. S. FORM 3

and Telegraph does not look quite as conservative as do earnings, dividends, and surplus. Of course we see the effects of the Panic in 1907 and 1908, by a marked drop. With the exception of these two years the price has varied about 14 points--from 129 to 143. Its general trend has been slightly upward, and that with no increase in either dividends or earnings, but a gradual piling up of surplus.

<u>People's Gas Light and Coke Company</u>

People's Gas Light and Coke Company (figure 14) seems to be almost as conservative a stock as the American Telephone and Telegraph. Its dividends have only varied from five to seven and one-fourth per cent in the ten years. During all this time earnings have shown a comfortable margin over the dividends. The surplus of People's Gas perhaps shows a closer correspondence to earnings than does the surplus of any other stock recorded. Its price has fluctuated a little more widely than that of American Telephone and Telegraph. From 99 in 1904 to 133 in 1905 is a considerable rise. During 1907 and 1908 we see as usual the effects of the Panic, and in the succeeding years, while there was an upward tendency, the high point of 1906 was not reached.

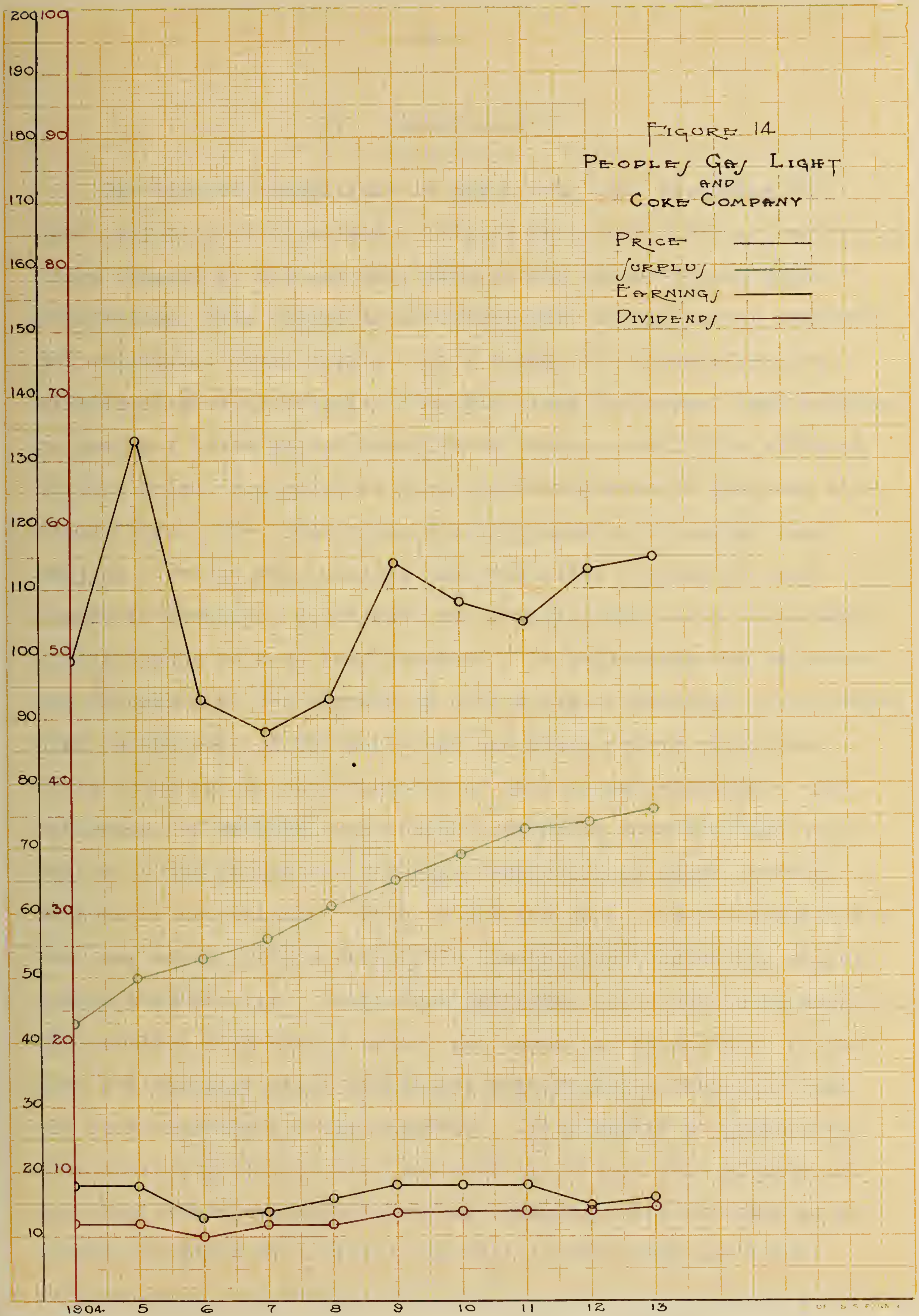

Figure 14
Peoples Gas Light and Coke Company
Price
Surplus
Earnings
Dividends
200 100
190
180 90
170
160 80
150
140 70
130
120 60
110
100 50
90
80 40
70
60 30
50
40 20
30
20 10
10
1904 5 6 7 8 9 10 11 12 13

IV. INDUSTRIALS

Our list of industrials is not a long one, including as it does only nine corporations. All of these are, however, extremely large companies, and several, such as the United States Steel Corporation, have played an important part in our recent financial and industrial development. As a class, the industrials are considered more speculative than the other two groups, and although we have not taken enough examples to furnish conclusive evidence on this point, the cases we have considered seem to bear out this supposition. The industrials which we have investigated seem subject to wider fluctuations than the other two classes with regard to earnings, dividends, and surplus, and their price variations appear to have been greater. In collecting the data for the industrials, two classes of errors may be expected to be larger than in the case of the railroads and other public utilities. These arise in the determination of surplus and earnings. The railroads, as we have seen, being interstate carriers, are compelled by the Interstate Commerce Commission to adopt uniform methods of accounting. Such is not the case with the industrials. They may adopt, within reasonable limits, such accounting procedure as they see fit. With such latitude, it is not to be expected that methods will always agree, and items may be included in surplus and earnings which should not rightfully be there, or left out when they ought to be included. With regard to prices, we must take into account the fact that the fiscal year of most of our industrials corresponds to the calendar year, and that as a result the Panic of 1907 will be felt in both 1907 and 1908.

National Lead Company

Taking up first for consideration National Lead, we have a company whose graph (figure 15) does not look very much out of the ordinary. It paid no dividends in 1904 and 1905, but in 1906 declared a three per cent dividend, which was increased to five per cent in 1907. In 1910 the rate was decreased to four per cent, and again to three per cent in 1911. The earnings upon the common stock of National Lead have not been extremely large at any time, but they have been fairly constant, as we would expect from such an industry as that of manufacturing paint and other lead products. The earnings have varied from three and one-half to six and one-half per cent. Surplus has shown a constant increase, agreeing closely to earnings. The price of National Lead was 20 in 1904 and 78 in 1906. We can account for such a large rise by its increased earnings, and the speculation resulting from a prospect of dividends to be paid in the future. We see a marked drop in 1907, a partial recovery in 1908, and in 1909 the highest price was reached. In 1908 and 1909 the stock paid five per cent, its high rate of dividends. During the next two years both earnings and dividends fell, and the price went down accordingly. In 1912 there was a slight increase in earnings, and a small rise in price, followed by a drop in the next two years.

American Car and Foundry Company

The appearance of the graph of American Car and Foundry (figure 16) is most peculiar. A rise in earnings from two per cent in 1905 to twenty per cent in 1907 was followed by a drop to

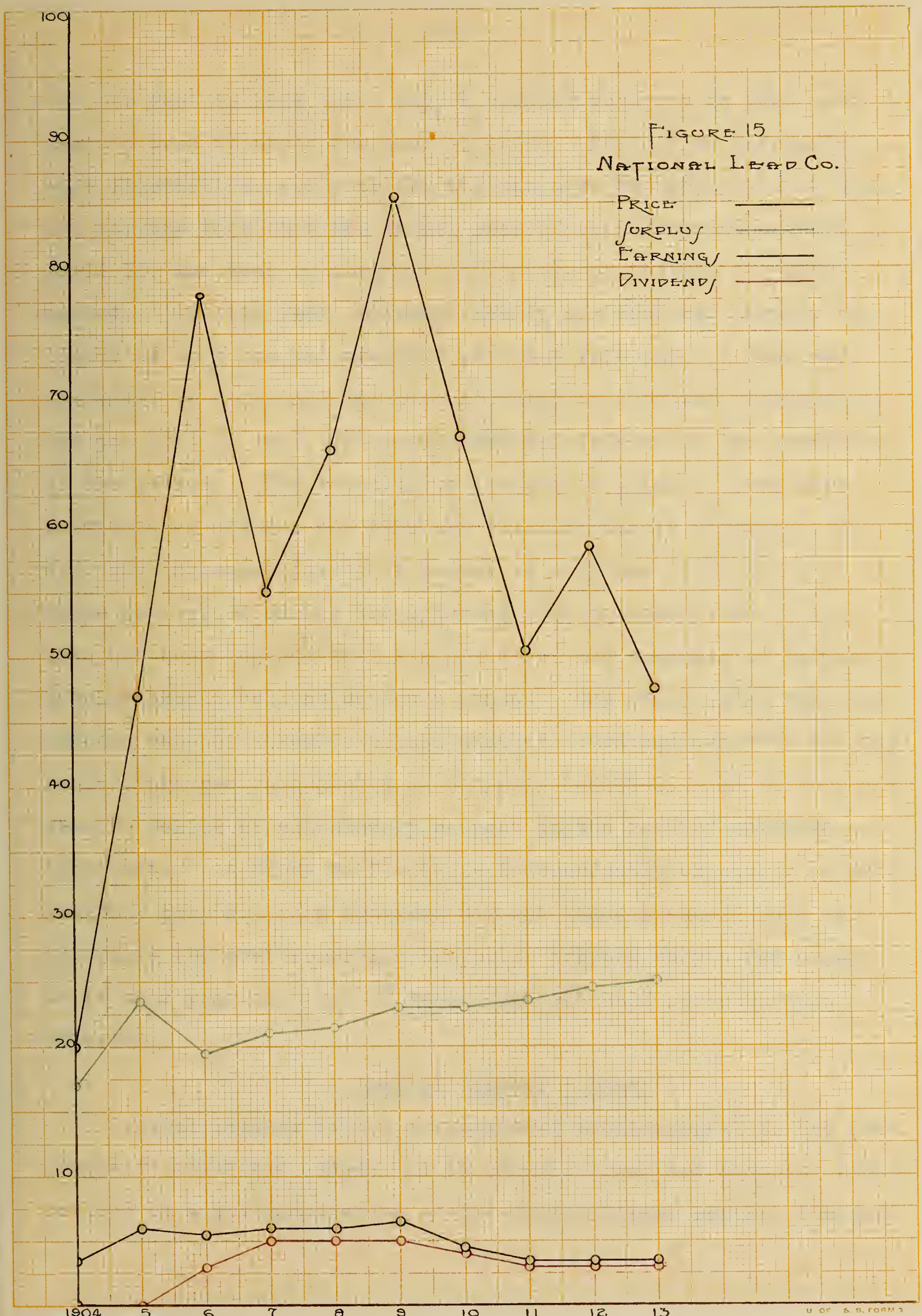

FIGURE 15
NATIONAL LEAD CO.
PRICE
SURPLUS
EARNINGS
DIVIDENDS
100
90
80
70
60
50
40
30
20
10
1904
5
6
7
8
9
10
11
12
13
U. OF S. S. FORM 1

two per cent in 1909, with only a partial recovery in 1910, and again a drop to three per cent in 1912. This is an extremely wide fluctuation, and would be all the more remarkable if it were not for the fact that the fiscal year of this corporation ends on April 30, and that as a result 1907 will not include the Panic period. In this year, although twenty per cent was earned, dividends of only one and one-half per cent were paid. They were increased to three and one-half per cent in 1909 and decreased to two per cent in 1910, which rate was maintained for the remainder of the period. The relation of surplus to price is even more difficult to account for than the fluctuations in earnings. Surplus has increased fairly in accord to earnings from 42 up to 97. Price has varied during the interval from 65 down to 38. It does not seem logical that a stock which has accumulated such a surplus should sell at so low a price. One would think that the surplus was not a real one, and that the earnings reported did not include charges that should be properly deducted. Price does not seem to follow at all closely changes in the rate of earnings or dividends. It seems to fluctuate independently of either or both. In 1908, however, when American Car and Foundry should have felt the Panic the most severely, the price dropped only a few points, as in this year earnings of twelve and one-half per cent were reported.

Central Leather Company

Central Leather is not a stock that should appeal to the conservative investor. First, it is a newly organized concern, formed in 1905 by a re-organization of the United States Leather Company.

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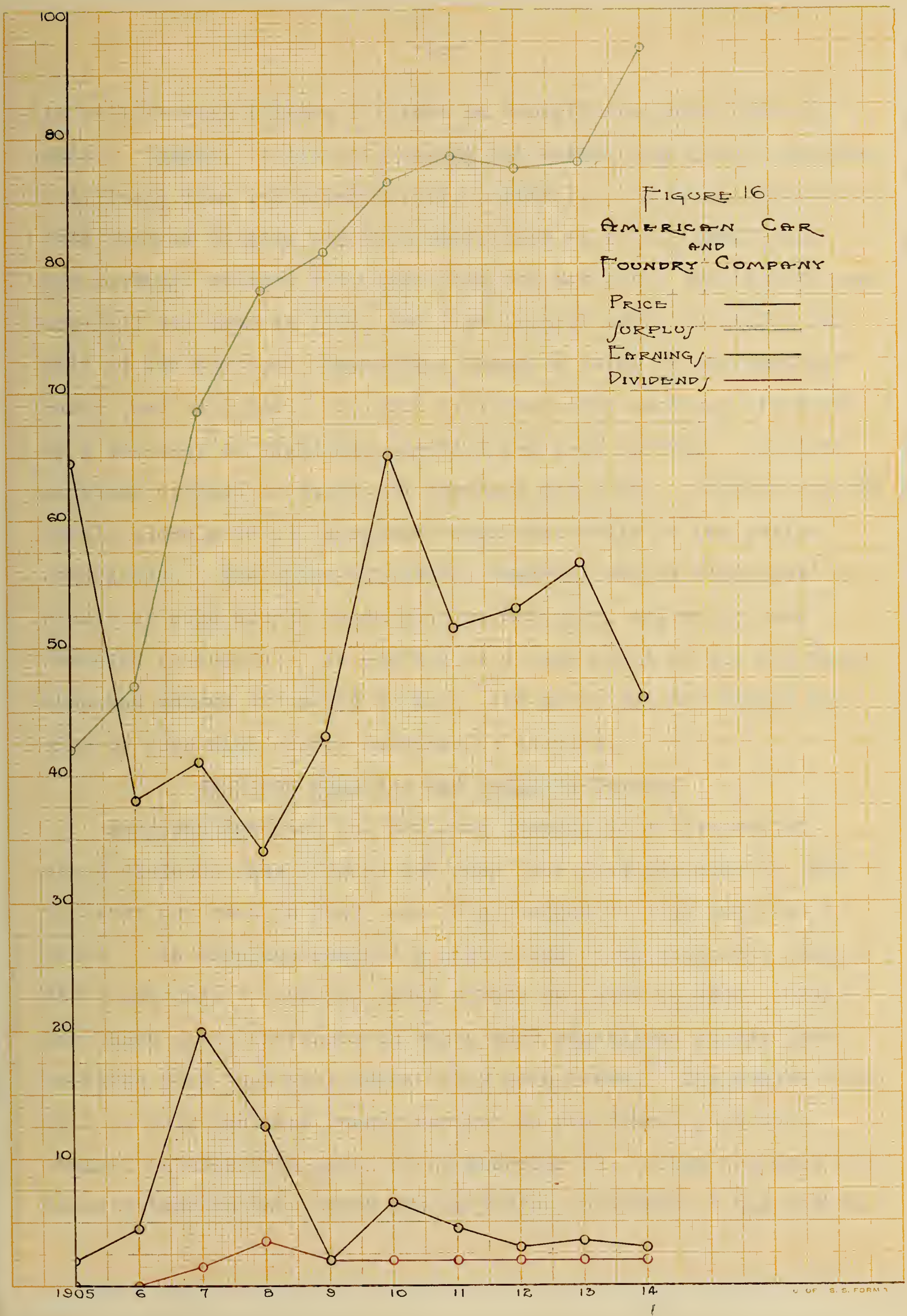

Figure 16
American Car and Foundry Company
Price
Surplus
Earnings
Dividends
100
80
80
70
60
50
40
30
20
10
1905
6
7
8
9
10
11
12
13
14

It will be seen (figure 17) that no reports are shown prior to 1906. Second, it did not, during the period considered, declare a dividend upon its common stock. Finally, its earnings have not been such as to give one much confidence as to its stability. Net earnings started with less than one per cent, rose to six and one-half per cent in 1909, and then dropped until in 1910 a deficit of two per cent, shown by a negative value of the earnings curve, was recorded. In 1911 a further drop occurred, followed by a recovery to eight and one-half per cent in 1912. In 1913 earnings dropped to three and one-half per cent. Surplus accords fairly closely to net earnings during the whole of the period considered. The price of Central Leather has not fluctuated as widely as some stocks which have earned more, and which have declared dividends. It started at a high point of 41, and from then has ranged around 25 to 30. Its price has not seemed to rise or drop with either earnings or surplus.

<u>American Smelting and Refining Company</u>

American Smelting and Refining Company is a corporation whose dividend rate (figure 18) rose from five per cent in 1905 to seven per cent in 1907, and then dropped to four per cent in 1909. Its earnings reached a high point of thirteen per cent in 1907, and fell to the low level of six per cent in 1911. They have been above dividends in every year considered except 1908, in which year they were practically coincident. The period from 1911 to 1912 included twenty months, as the fiscal year was changed in 1912 from April 30 to December 31. Thus the sets of observations on this stock are only nine in number. The surplus

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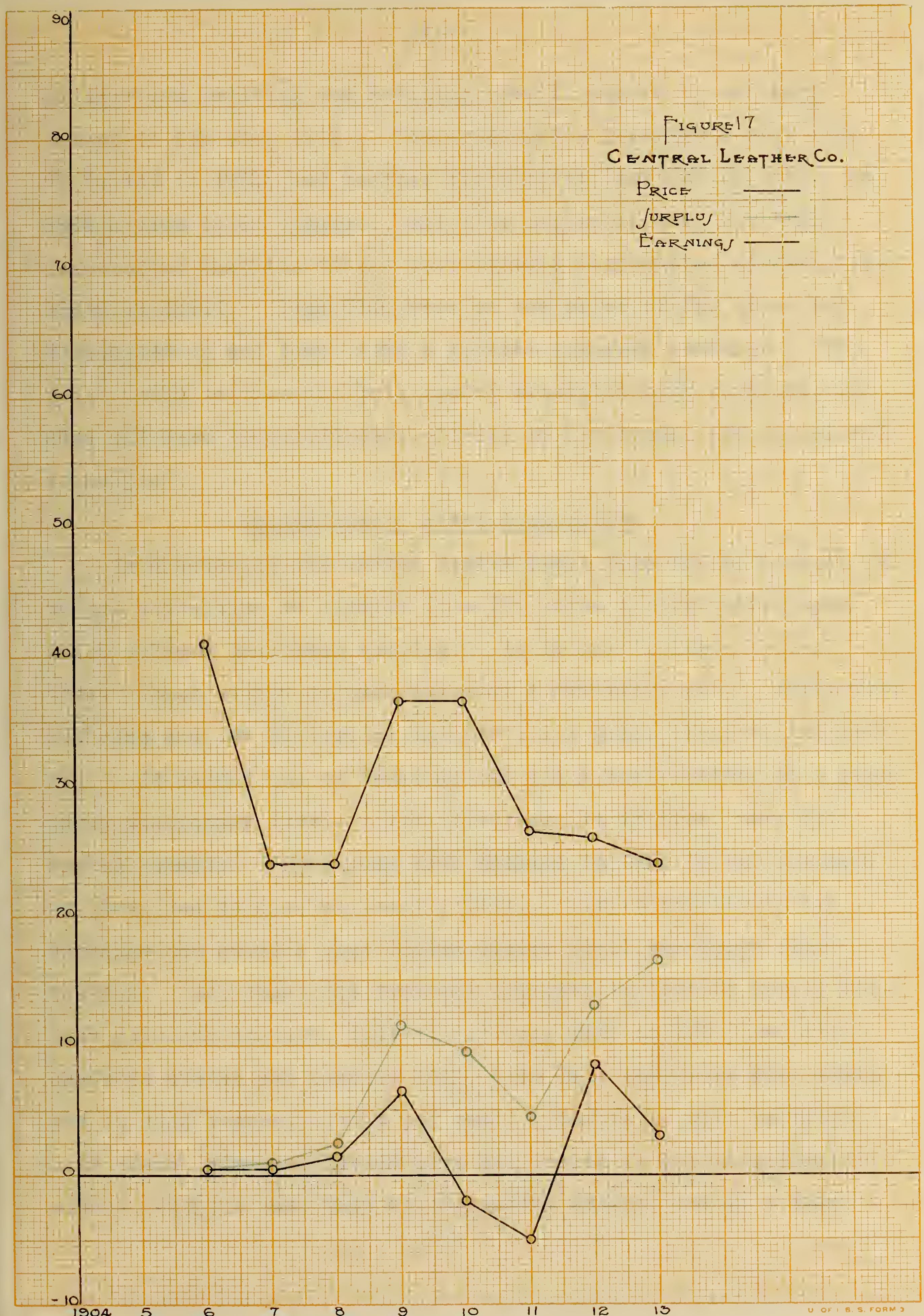
Figure 17
Central Leather Co.
Price
Surplus
Earnings
90
80
70
60
50
40
30
20
10
0
-10
1904
5
6
7
8
9
10
11
12
13
U. of I. S. S. Form 3

of American Smelting and Refining rose in accord to earnings, except in the year 1911. The price had a remarkable rise from 75 to 140 in 1906, and another eight point increase in 1907. In 1908 a drop to 86 occurred, which we may ascribe to the Panic, remembering that the fiscal year of this corporation at that time ended in April. From this year on the price of the stock has fluctuated up and down, with a general downward tendency. The price seems to rise and fall rather generally with earnings, but does not seem to accord very closely to dividends, and not at all to surplus.

United States Steel Corporation

In discussing the United States Steel Corporation (figure 19) we are attempting to dismiss in a few words a corporation upon which volumes have been written. It is our "billion dollar trust" which evoked so much interest a few years ago. Aside from its size and its historical interest, its graph alone is interesting. It is not one of those stocks which has remained at a seemingly stationary level. Its dividends, it is true, have not varied greatly. They rose from nothing in 1905 to two per cent in 1906, and to five per cent in 1910. It is chiefly in its earnings and surplus that United States Steel has shown fluctuation. Earnings rose from one per cent in 1904 to nearly sixteen per cent in 1907, fell to four per cent in 1908, and rose again to twelve per cent in 1910. In 1911 they were down again, but in 1913 reached eleven per cent. Naturally with earnings like these, since dividends have not varied to any considerable extent, surplus must show an increasing amount, but at a very

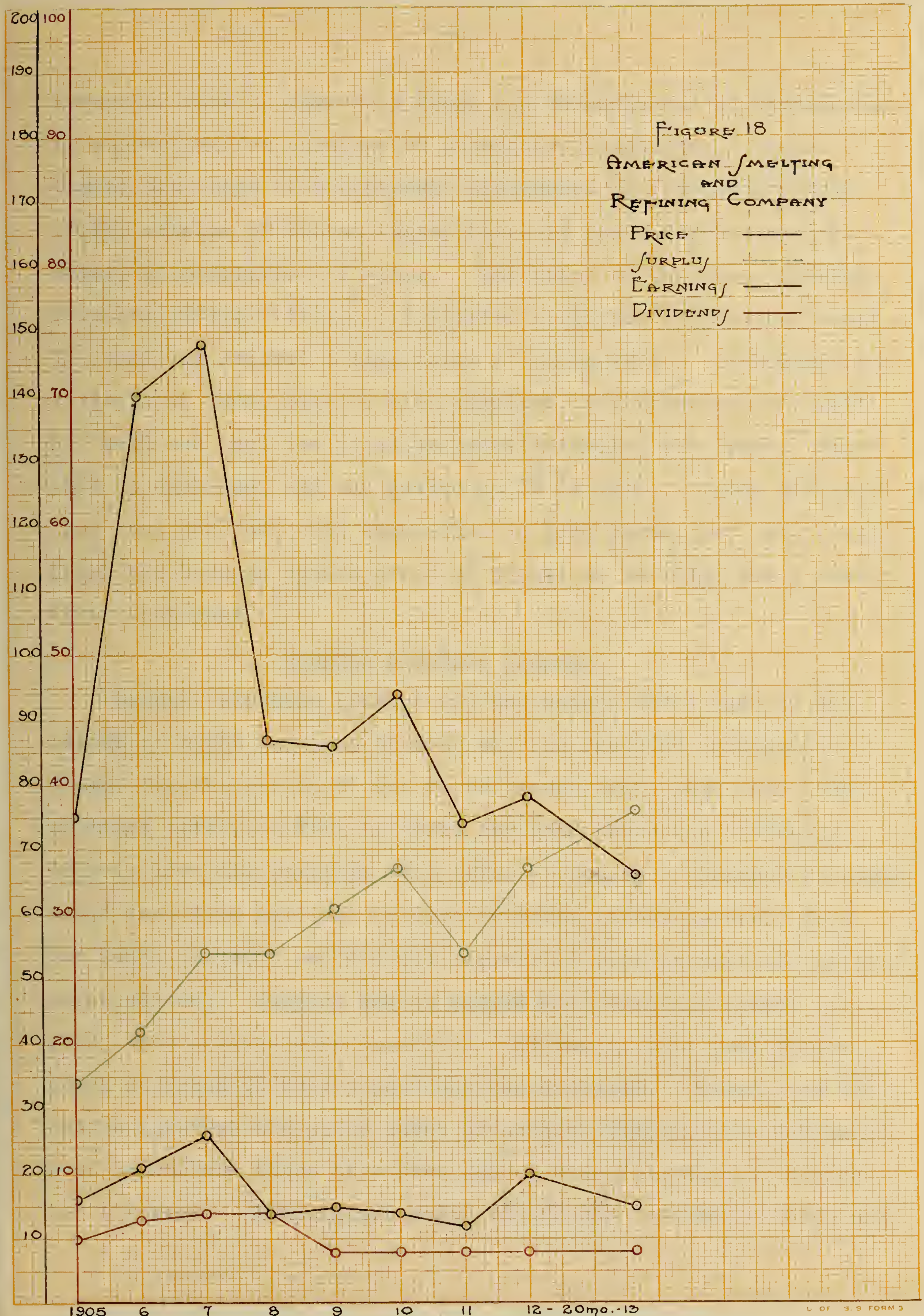

Figure 18
American Smelting and Refining Company
Price
Surplus
Earnings
Dividends
200 100
190
180 90
170
160 80
150
140 70
130
120 60
110
100 50
90
80 40
70
60 30
50
40 20
30
20 10
10
1905
6
7
8
9
10
11
12 - 20mo.-13
U OF I S S FORM 3

irregular rate. Temporary drops may be explained as differences in accounting for earnings of subsidiary companies. It is beyond the scope of the present discussion to inquire how much of the surplus of United States Steel is real, and how much is merely an absorption of water. The price of the Steel Corporation has varied widely. It started at 15 and rose rather steadily until it reached a high point of 81 in 1911. It had dropped slightly in 1907, but the high earnings of fifteen and one-half per cent had kept the price up notwithstanding the Panic. Since 1911 it declined, and was quoted at 59 in 1913. Price and earnings rose and fell with each other in some cases, but not in all. There has been an upward trend of prices up to 1911, but a decline after that year.

General Electric Company

General Electric (figure 20) has maintained a rate of dividends of eight per cent thruout all the interval considered. Except for the period of the three years, 1907, 1908, and 1909, earnings were from five to eight per cent above the dividends. Only in 1908 did earnings fall below dividends. General Electric would seem from our data to have suffered rather severely from the Panic of 1907, and did not recover as fast as most of the other corporations. Surplus was in accord with earnings except in 1912, when a large drop occurred. It was in this year that a stock dividend of thirty per cent was declared. Taken over the entire interval the price level of General Electric has fallen to some degree and there have been rather wide fluctuations during the interval. The highest point of 182 was reached in 1905, and

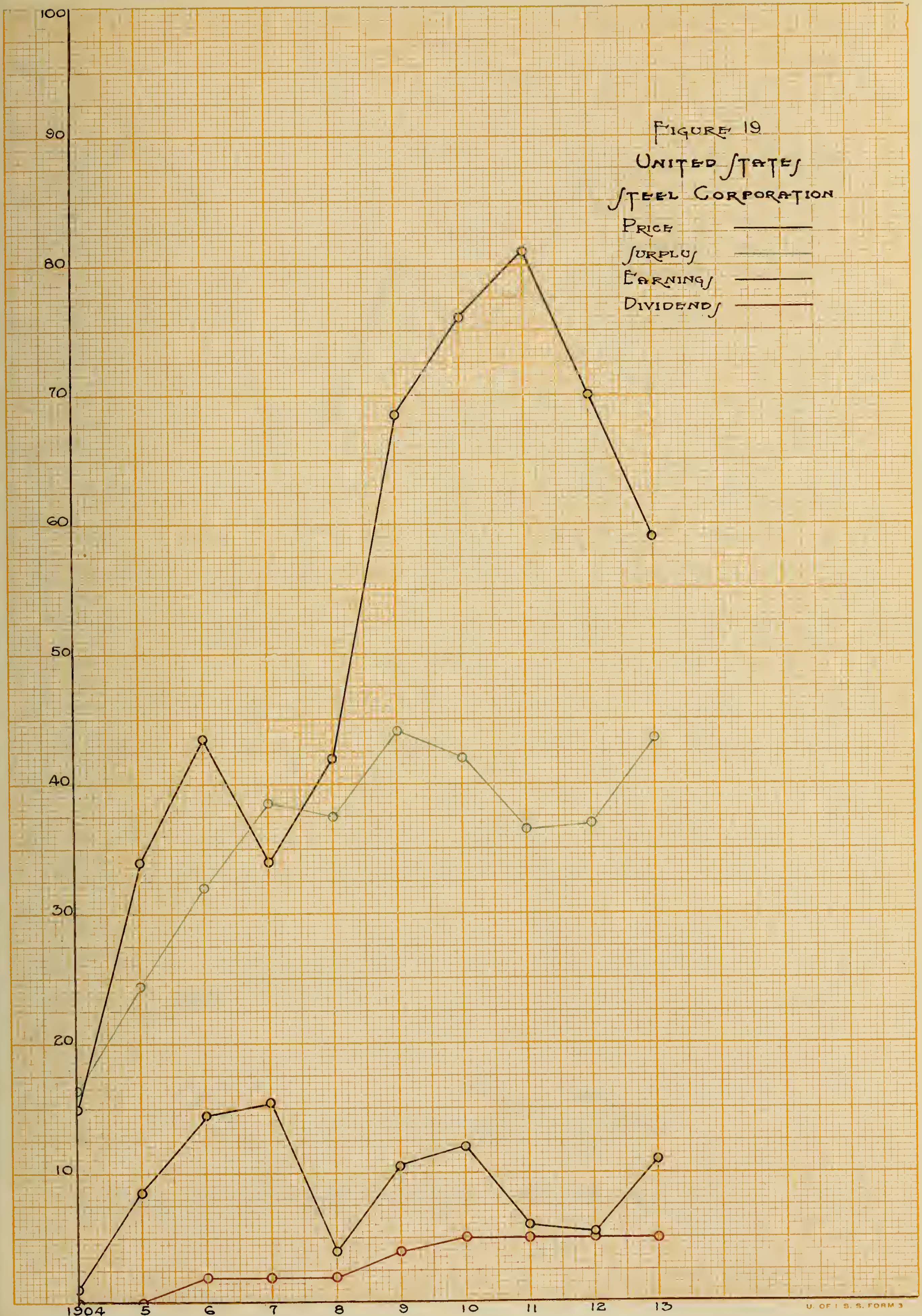

Figure 19
United States
Steel Corporation
Price
Surplus
Earnings
Dividends
100
90
80
70
60
50
40
30
20
10
1904
5
6
7
8
9
10
11
12
13
U. OF I. S. S. FORM 3

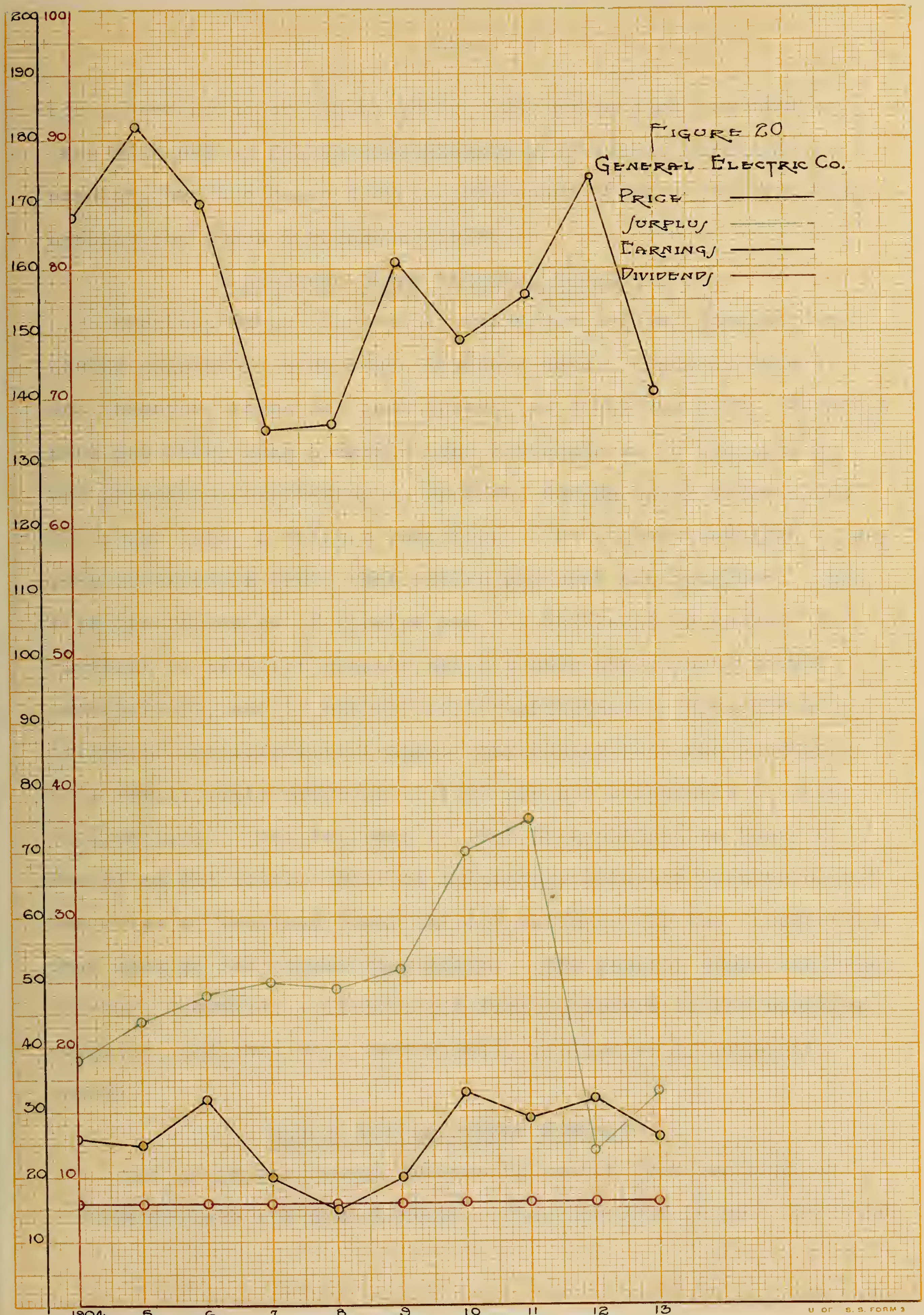

Figure 20
General Electric Co.
Price
Surplus
Earnings
Dividends
200 100
190
180 90
170
160 80
150
140 70
130
120 60
110
100 50
90
80 40
70
60 30
50
40 20
30
20 10
10
1904
5
6
7
8
9
10
11
12
13
U of S. S. Form 3

the lowest price of 135 in 1907. The price does not seem to have advanced or fallen consistently with either earnings or surplus, but the heavy drop in 1913 seems to have followed very exactly the stock dividend of 1912.

<u>American Sugar Refining Company</u>

American Sugar (figure 21) resembles General Electric in having maintained a constant dividend rate. In this case it was, however, seven per cent instead of eight per cent. Earnings have not shown such a margin over dividends as in the case of the preceding corporation. In fact, during three years, 1909, 1910, and 1913, a deficit resulted. The highest earnings of any year occurred in 1907, when twelve per cent was reported. The wide discrepancies of surplus are not difficult to account for. Previous to 1907 the company had not made any reports to its stockholders, and it was not to its advantage to make the condition of the corporation appear any better than was necessary. As a result, data previous to 1907 are not comparable to later observations. The decrease in 1908 is explained in Moody's Manual as due to the "Cost of a Refinery deducted from surplus." The price of American Sugar has not shown nearly the fluctuation that most of the stocks have shown. Its general trend has been, however, downward. It does not seem to accord to the earnings reported, and must have been greatly influenced by external causes.

<u>United States Rubber Company</u>

United States Rubber (figure 22) until 1912 declared no dividends upon its common stock. In that year it paid three and

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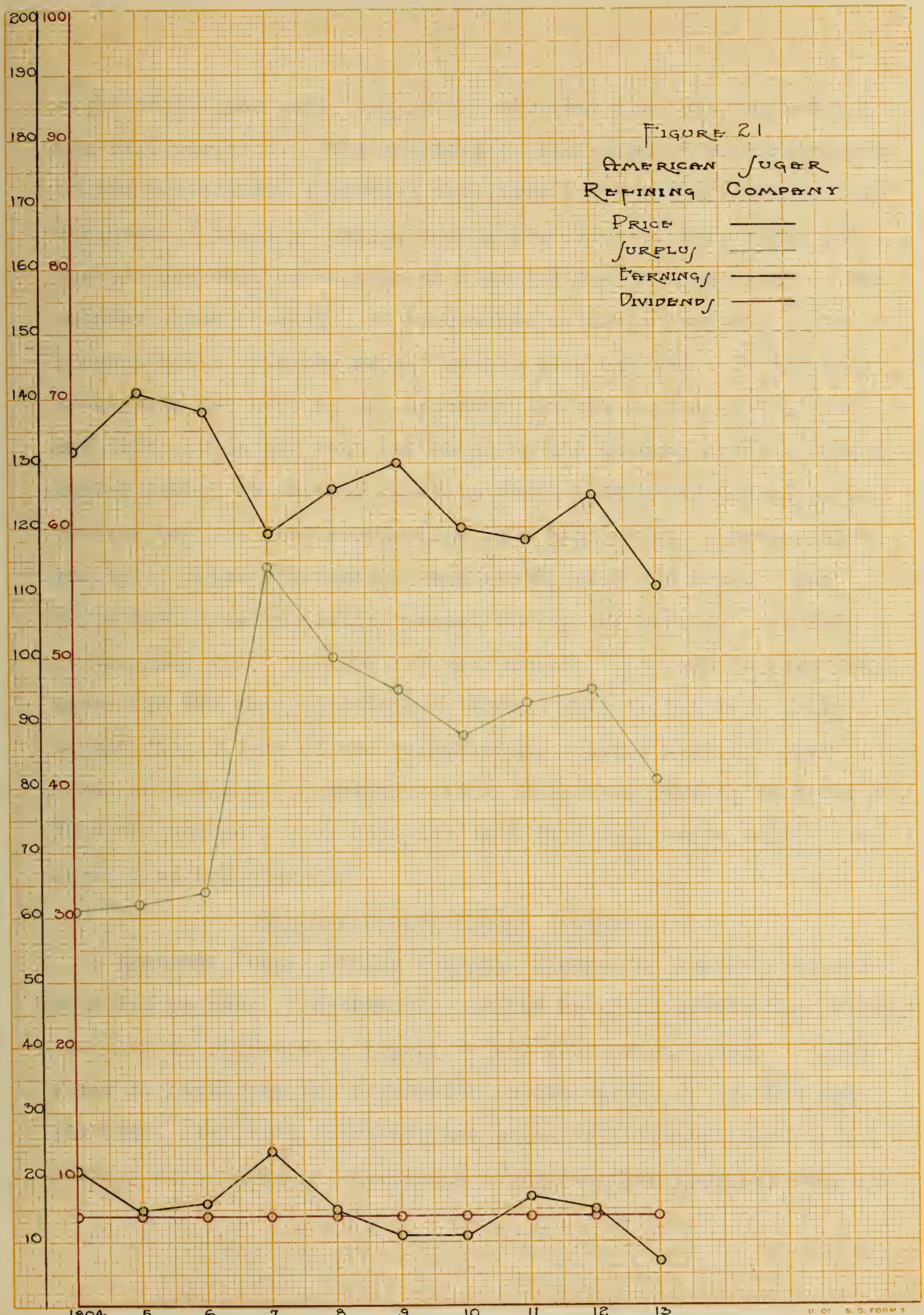

Figure 21
American Sugar Refining Company
Price
Surplus
Earnings
Dividends
200 100
190
180 90
170
160 80
150
140 70
130
120 60
110
100 50
90
80 40
70
60 30
50
40 20
30
20 10
10
1904
5
6
7
8
9
10
11
12
13

eight-tenths per cent, and later increased the rate to four and one-half per cent. The earnings of the corporation during most of the period have been such that more dividends might have been declared. Earnings varied during the interval from about one-quarter per cent up as high as nine and one-half per cent. The company chose, however, to accumulate a larger surplus, or to extract water from the stock, as the case may be. It had only twenty-six per cent at the beginning of the period, but at the end fifty three per cent was shown on the balance sheet. United States Rubber is another stock in which a large accumulation of surplus has not been accompanied by a high price. During 1911 and 1912, price and surplus were practically the same. The price has, however, tended upward during the period. In 1905 it was only 26. In 1913, 59 was quoted. It will be seen that there are two sets of data for 1913. This is due to a change in the fiscal year of the corporation. Until 1913 the year ended on March 31. During 1913 a change was made to December 31. Thus the second set of data for 1913 is for the nine months from April 1 to December 31.

Anaconda Copper Mining Company

Anaconda Copper Mining Company (figure 23) is the last corporation we have to consider. It has been one of our most widely fluctuating stocks with regard to all four of our items. 1906 seems to have been the high point in its career. In that year earnings, dividends, surplus, and price--all reached a maximum. A heavy drop ensued. Dividends increased from four per cent in

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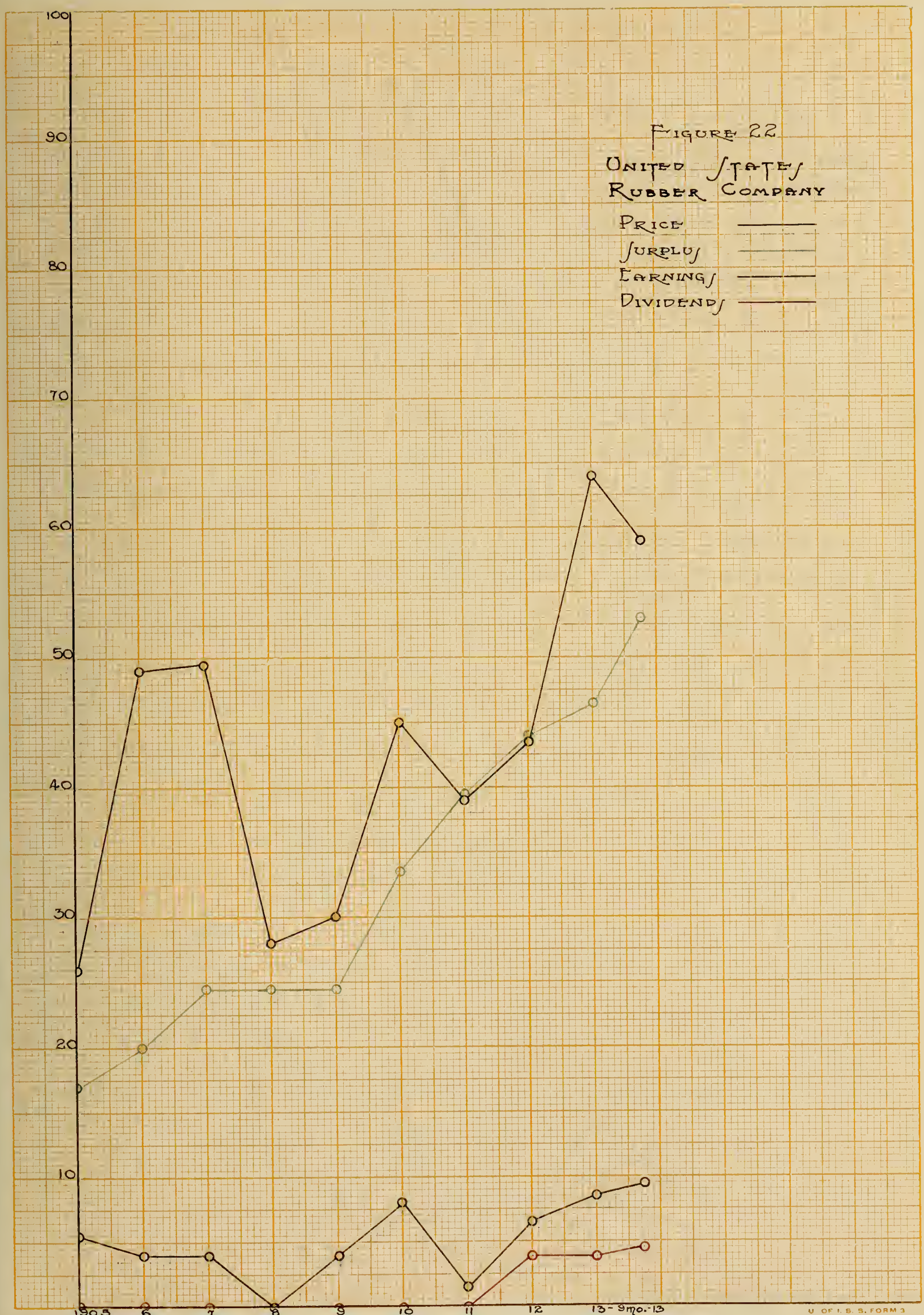

Figure 22
United States Rubber Company
Price
Surplus
Earnings
Dividends
100
90
80
70
60
50
40
30
20
10
1903
6
7
8
9
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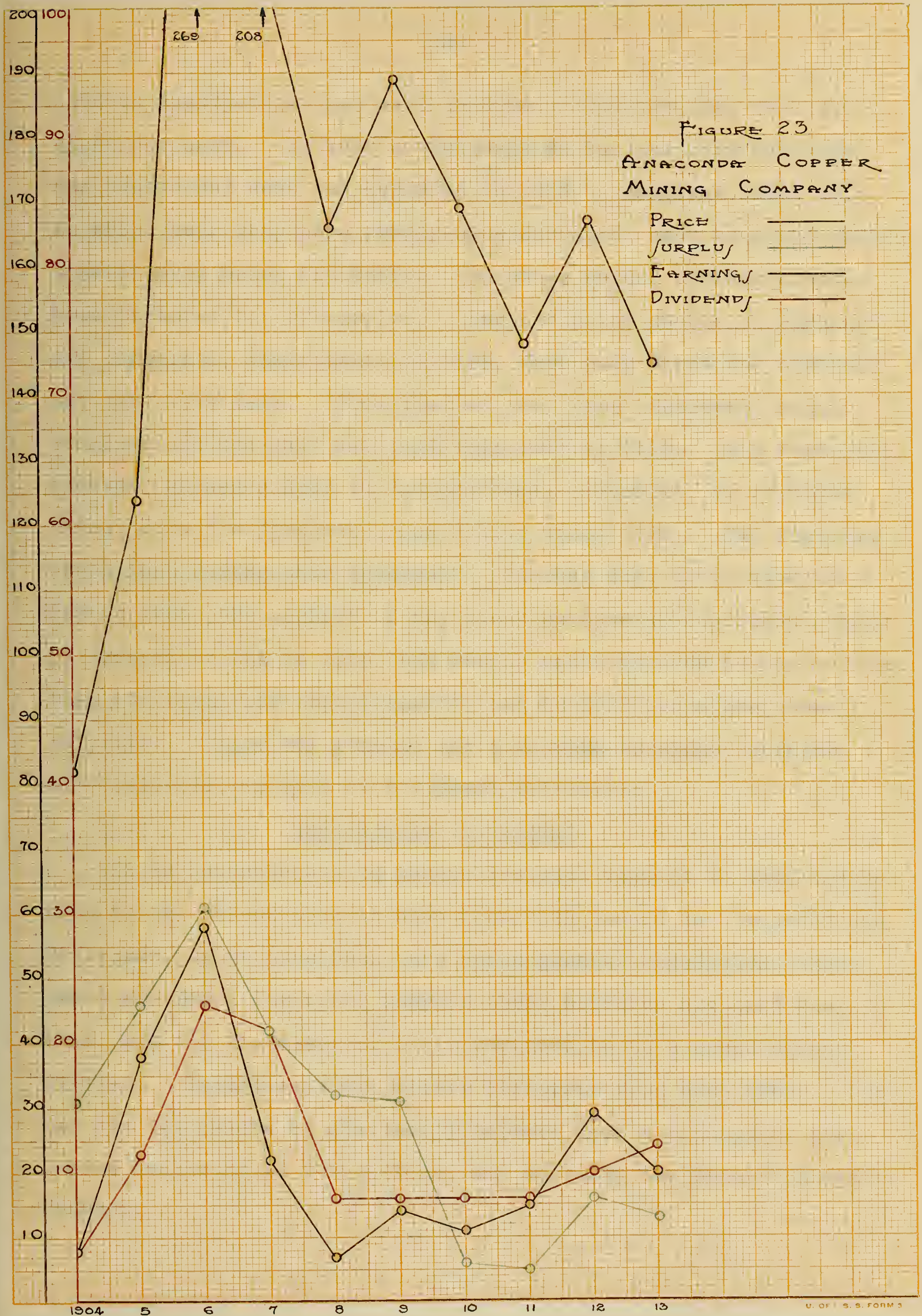

Figure 23
Anaconda Copper Mining Company
Price
Surplus
Earnings
Dividends
268
208
200 100
190
180 90
170
160 80
150
140 70
130
120 60
110
100 50
90
80 40
70
60 30
50
40 20
30
20 10
10
1904
5
6
7
8
9
10
11
12
13
U. OF I. S. S. FORM 3

1904 to twenty-three per cent in 1906. In 1908 they fell to eight per cent. In 1912 an increase to ten per cent was made, and twelve per cent was declared in 1913. Earnings after 1906, in which year they were twenty-nine per cent, have remained rather consistently below dividends. In other words, dividends have been declared out of surplus. The low point as far as earnings are concerned, was reached in 1908, when only three and one-half per cent were made. From then on they have increased, until fourteen and one-half per cent were made in 1912. The next year, however, showed a drop to ten per cent. Surplus, as we would expect from the foregoing, has fallen since 1906. But what has price done during this interval? It rose from 82 in 1904 to 269 in 1906--the highest of any stock we have to consider. Then it dropped to 166 in 1908, but was up again in 1909 to 189. Since then its trend has been downward, and in 1913 the average was only 145. Price has gone up and down with earnings, surplus, and dividends, in most of the years considered.

Industrials in General

It is not possible to generalize with respect to industrials even to the extent that we have done with regard to the railroads. Railroads, as we have seen, are under greater regulation, their rates are fixed for them, many of their policies are laid down to them, and the character of their business is to a great extent similar. Industrials are widely different from each other. One can see few points of similarity between such a company as the United States Steel Corporation, and one like the General Electric Company.

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Perhaps our industrials are no more alike in any one characteristic than in the fact that all of the corporations we have considered have been identified with the "trust movement". The consolidation of industries led in many cases to a large increase in the proportionate amount of stock as compared with the tangible assets or the earning power of the new corporation. Thus some of the companies started out with an actual deficit, but not one that was shown on the books of account. The accumulation of a surplus, as it was called, was as a matter of fact merely a gradual extinction of this deficit. As a result we see large book surpluses, and at the same time low prices.

With regard to earnings, dividends, and prices, we can say little. All three factors have fluctuated widely both in the several corporations, and also within each corporation. The prices of two have tended upward, two have remained practically stationary, and five have gone down. Perhaps we can say that as a class, the price of the industrials shows a less intimate relationship to the earnings and dividends than in the case of the other two classes.

V. CONCLUSIONS

We have briefly considered the stocks of each of the three groups--railroads, other public utilities, and industrials. We have pointed out a few of the most salient features of each stock. We have attempted to explain the most remarkable fluctuations as to surplus, earnings, dividends, and prices. We have tried to account for such discrepancies as were noted. These, as we have seen, have occurred principally in the items of surplus and earnings, which, as before noted, are susceptible to errors in observation and in accounting principles. We have traced the cases in which the price seems to accord to dividends, earnings, and surplus, and those instances in which it does not seem to follow them. Finally we have generalized to some extent the stocks of the three groups.

We may summarize our conclusions from these observations as follows:

First, it has been practically impossible with the means at our disposal, to eliminate altogether the effect of the external causes, and of those internal causes which we did not wish to consider. We can note such important factors as the Panic of 1907, but we must not suppose that other factors have not been at work. At no time can we say that the price has not been influenced by outside causes. They may not be as noticeable in their effects, but nevertheless they are ever-present. Furthermore, we must remember that human nature will cause us to seek those causes which

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we hope to find, and to neglect those which do not fall in with our foregone conclusions. Thus we will look for an explanation of a drop in price where we would naturally expect a rise, but we may not ask about the cause of a twenty per cent rise when we would be led to anticipate only a ten per cent increase in price.

Again, we are compelled to admit that in a discussion of this kind, covering as it does, only twenty-three stocks, for a period of ten years, at a time when we are not able to say with any degree of accuracy what have been the external causes, and how they have worked, we are not able to draw any very valid conclusions. The present paper may be a good nucleus for a more exhaustive treatment of the subject, one that will embrace a larger number of stocks, for a longer term of years, and will attempt to investigate more thoroughly such considerations as the rate of interest in the country, the general condition of the money market, and the country's condition as regards trade, both domestic and foreign. However, we need not say that the present investigation has been altogether unproductive of results. The number of stocks considered is sufficiently large, and the term of years is long enough, that we can at least arrive at some conclusions which the general tendencies as shown by the stocks may be said to justify.

Third, we must not assume that an increase in the amount of surplus will necessarily increase the price of a stock to the same extent. One might very naturally assume that the creation of a surplus of twenty-five per cent in a corporation whose stock would

normally sell at 100, would increase its price to 125. This conclusion would seem from our observations to be unjustified. Neither can surplus be said to exert any great influence upon steadying the price of a stock. That surplus does not exert a greater effect upon the price is probably due to the following facts:

1. Buyers do not purchase a stock to realize upon the sale of its assets, but for what it is worth as a going concern.

2. In many cases surplus is not real, but is either made up to a great degree of items which should properly be charges against profit and loss, though reported as appropriations of profit, or else is a gradual extinction of a portion of the water that has been infused into the stock.

3. Stock-buyers do not read balance sheets to any considerable extent, and if they do, they have no great degree of confidence in the statement submitted by the corporation.

Our railroads and other public utilities exhibit a surplus that is in closer accord to price than that of the industrials. This, as pointed out above, may be because of the greater amount of stock-watering in the case of the industrials.

Fourth, in most cases the price fluctuations follow changes in earnings closer than they do either dividends or surplus, but the changes are not directly proportional to each other. To explain, we would expect about a fifteen per cent rise in price with a one per cent rise in earnings, if we capitalize earnings at about six and one-half per cent. But a rise of this size does not usually occur. Part of this we may explain as the effect of

external causes. Part we may explain by saying that it is the belief of investors and speculators that the earnings will not be maintained at the new level.

Fifth, the price does not respond as quickly to a change in the dividend rate, when unaccompanied by a change in the rate of earnings, as we might expect. A general change in the rate of dividends; that is, a change in the level of dividends maintained, seems, however, to affect the general level of the price.

Sixth, we must conclude that price fluctuations have been more severe during the period than one might have been lead to expect, and that these fluctuations occur in the conservative stocks as well as in the more speculative. Of course our observations include years of extreme speculation, a period of financial panic, and a time of general rising prices. But these external conditions do not justify such a wide range of price fluctuations. They make us think that none of the common stocks in the list selected can be recommended to the investor as a safe place to put his money.

Finally, if we are to combine our conclusions, we shall see the relative potency of surplus, earnings, and dividends as regards price fluctuations, and price levels. Earnings are the most potent factor in producing immediate fluctuations of price. Surplus, while it arises directly from earnings, does not seem to have the effect that one might very naturally anticipate. In fact, it appears to exercise very little influence, if any, upon the price of the stock, or upon its fluctuations. Neither does it seem to have an appreciable effect upon making these fluctuations

less. Dividends, while they do not have such an effect as earnings upon immediate changes in price, appear to exercise the greatest effect upon the level of prices of a stock.

At the last analysis, an investor values a stock for the return it yields him. If earnings rise, he figures that in a short time he will get higher returns, and therefore he will pay a higher price for the stock. If the rate of dividends goes up, his judgment is affirmed, and the price will remain at a level above that at which he bought it. If dividends do not rise, his judgment has been faulty, and the price will drop from the level at which he purchased.

In estimating the value of bonds we do not have such a difference between earnings and dividends. In this case earnings are dividends, and are not subject to fluctuation. To a lesser degree is this true of preferred stocks. Here both earnings and dividends coincide, but are variable. They have a fixed maximum, but no definite minimum. Common stocks, on the contrary, have neither a fixed maximum nor a minimum. Neither do earnings and dividends coincide. It is only in case that the deviations of earnings from dividends approach zero that earning power can be used as a basis for valuing a common stock. Earnings influence prices in so far as they influence the probability of changes in the dividend rate. Obviously, it is not good policy for a corporation to maintain a rate of dividends of six per cent when earnings are not more than five per cent. Such a policy will in time be destructive, and the corporation will be compelled eventually

to reduce dividends, or pass them altogether. On the contrary, if a corporation has a board of directors which believes in putting all earnings above a certain amount to surplus, the investor is not likely to receive a higher rate of return at an early date. The idea that sometime in the dim future the stock may pay a much higher rate of return because of a low rate now, does not appeal to the investor in the same way that a small present increase does. Surplus is only earnings that have been allowed to accumulate in order that eventually the stock may earn more. But we have seen that the accumulation of a surplus does not appear to cause a rise in the price of a stock.

However, the dividends of the ordinary corporation must be in close correspondence to its earnings. Very few boards of directors can withstand the clamorings of stockholders for dividends when earnings justify them. Neither can they keep up a dividend rate which earnings do not warrant. Thus it is that earnings must bear a very close relation to dividends or to the probability of dividends. If a bondholder is assured of the payment of the interest and of the principal when it comes due, it is of small moment to him whether the corporation earns fifteen per cent on its stock, or only ten per cent. So if the holders of two common stocks were sure that both stocks would always pay six per cent dividends, that in neither would a stock dividend be declared, that neither business would be wound up, they would value the two stocks at approximately the same price, even though one earned only six per cent and the other twelve per cent. This

is only another way of saying that dividends are what the investor is looking for, not earnings. When common stocks reach such a stability of dividends as have bonds of interest rates, then we may capitalize them upon some logical basis. But that basis will be the basis of earnings paid over to the stockholder; that is, dividends, not of earnings made by the corporation.